

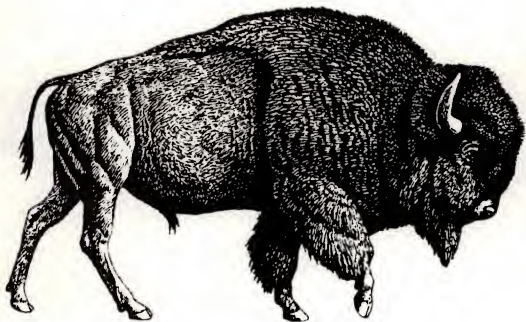
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1996 management
operating
procedures

Interim Bison Management Plan

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DEPARTMENT OF LIVESTOCK



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BOARD OF LIVESTOCK - CENTRALIZED SERVICES 406-444-2023
MEAT, MILK & EGG INSPECTION DIV. 406-444-5202

HELENA, MONTANA 59620-2001

DECISION NOTICE

Interim Bison Management Operating Procedures

Montana Department of Livestock

Scott Hart Building

P.O. Box 202001

Helena MT 59620-2001

Montana Fish, Wildlife and Parks

1420 E. 6th Ave.

P.O. Box 200701

Helena MT 59620-0701

The Montana Department of Livestock and Montana Fish, Wildlife and Parks have decided to implement the Interim Bison Management Operating Procedures, as described in the attached management plan (Appendix A), in cooperation with the National Park Service; the United States Animal and Plant Health Inspection Service, Veterinary Services; and, the United States Forest Service.

The environmental assessment was released for public comment on December 20, 1995. A total of 260 comments from state and federal agencies, Native American tribes, organizations, and individuals were received prior to the close of public comment February 2, 1996. Minor corrections were made to the management plan, based on public comment. A summary of public comments, and a response to public comment is also attached to this decision notice (Appendix B).

It is our determination, based on the EA and public comments to the EA, that implementation of the Interim Bison Management Operating Procedures will not significantly affect the human environment. Therefore, an Environmental Impact Statement is not required prior to implementation of this action.

A handwritten signature of Laurence Petersen in dark ink.

Laurence Petersen

Executive Officer, Montana Department of Livestock

8/9/96
Date

A handwritten signature of Patrick J. Graham in dark ink.

Patrick J. Graham

Director, Montana Fish, Wildlife and Parks

8-9-96
Date



FINDING OF NO SIGNIFICANT IMPACT
Interim Bison Management Plan

YELLOWSTONE NATIONAL PARK

In accordance with the provisions of the National Environmental Policy Act of 1969 and the regulations of the Council on Environmental Quality, 40 CFR 1508.9, the National Park Service (NPS) and State of Montana prepared an Interim Bison Management Plan, Draft Environmental Assessment (EA). The EA analyzed the proposed action and no action alternatives.

PROPOSAL

The NPS, Montana Department of Livestock (DOL) Montana Department of Fish, Wildlife and Parks (FWP), United States Department of Agriculture, Animal and Plant Health Inspection Service (APHIS) and USDA, Forest Service (USFS) propose to implement interim bison management operating procedures as provided for in the proposed action presented in the EA. The EA described the extent and type of involvement of the above agencies in the proposal to manage brucellosis-exposed, wild, free-ranging bison that move primarily during winter from Yellowstone National Park onto public and private lands in Montana along the northern and western boundaries of the park. The NPS, either directly or under the authority of DOL, will monitor, capture, test, and release or ship to slaughter, capture and ship to slaughter, haze, and shoot bison to prevent the potential spread of brucellosis from bison to domestic cattle and to provide circumstances in which bison may freely range on adjacent federal lands where cattle are not present. The NPS will maintain management authority for all actions occurring inside Yellowstone National Park, and DOL will maintain primary authority for all actions occurring in Montana outside Yellowstone National Park. Management actions and lead agency responsibility for actions are identified in the Interim Bison Management Plan (Appendix A).

The management objectives for the Eagle Creek/Bear Creek area are to limit the distribution of free-ranging bison to specified cattle-free federal lands adjacent to Yellowstone National Park and to prevent bison from migrating farther onto other federal, state, or private lands. The agencies will emphasize monitoring for this area, but hazing and shooting operations will also be used under circumstances described in the final plan. The management objective for the Reese Creek area is to prevent bison from leaving Yellowstone National Park in the Reese Creek boundary area and moving north onto adjacent private land where cattle are grazed (Figure 1, Appendix A). The primary management action used to achieve this objective will be the capture of bison inside the park in a NPS provided facility and shipment to slaughter, but monitoring, hazing, and shooting may also occur. The NPS may provide any bison captured inside Yellowstone National Park to the state of Montana or to Native American tribes or associations pursuant to federal laws or policies. The management objective for the West Yellowstone area is to limit bison distribution to Yellowstone National Park and certain public lands adjacent to Yellowstone National Park. Bison distribution outside the park will be limited to times, locations, and certain bison testing seronegative for brucellosis in which the risk of brucellosis transmission from bison to cattle can be controlled. The agencies' primary management actions during winter will be the capture and testing of bison outside of Yellowstone National Park, in a facility provided by APHIS, and shipment of seropositive bison and pregnant bison to slaughter. The agencies also will monitor, haze, and shoot bison where and when appropriate. Bison occasionally leave Yellowstone National Park in locations other than the Reese Creek and West Yellowstone areas. Generally, these bison use public lands in remote areas and in areas allocated to uses precluding domestic cattle. Agencies will monitor bison that move into the Hellroaring Creek and Slough Creek areas and north of Grayling Creek/Fir Ridge in the Lee Metcalf/Cabin Creek area (Figure 1). If bison moved beyond those areas, agency personnel will haze or shoot those bison. DOL will be responsible for deciding when and where bison will be removed from private property in Montana. Personnel from the National Biological Service (NBS), APHIS Veterinary Services, FWP, and NPS may assist DOL with the collection of blood and tissue samples from bison for the purpose of disease surveillance or other research and monitoring. The agencies may also use live bison obtained from capture operations for approved research purposes.

ALTERNATIVES CONSIDERED

Alternative 2, the no action alternative, is a continuation of current interim bison management. Under this alternative, the DOL would continue to shoot bison moving from Yellowstone National Park into Montana. NPS personnel would assist, at the request and under the authority of the state of Montana, in shooting bison in Montana that pose a threat to private property, human safety, or maintenance of Montana's brucellosis class-free status.

PUBLIC INVOLVEMENT

The agencies received 260 comments from state and federal agencies, Native American tribes, organizations, and individuals on the EA during the 42-day comment period that began December 20, 1995. The comment period originally was scheduled to end January 19, 1996, but due to requests from the public, the comment period was extended to February 2, 1996. The agencies prepared a summary of public comments, corrections to the EA, and responses to issues and document is incorporated in Appendix B (Summary of Substantive Public Comments and Responses to the Interim Bison Management Plan Draft Environmental Assessment).

The U.S. Fish and Wildlife Service concurred with the finding that the proposed actions will have no effect or are not likely to adversely affect the threatened bald eagle (Haliaeetus leucocephalus) or grizzly bear (Ursus arctos horribilis), the endangered peregrine falcon (Falco peregrinus anatum), or the non-essential experimental gray wolf (Canis lupus). The endangered whooping crane (Grus americana) is found in the region but is not found in the project area and will not be affected. The Montana State Historic Preservation Office and Advisory Council determined the proposed actions would not adversely affect cultural resources.

Based on public comment, the agencies modified the proposed action and incorporated changes in the final plan (Appendix A). In response to public comment, the agencies will use certified weed-free hay for all baiting and capture operations. Respondents expressed concerns that management actions did not limit the number of bison that could be killed and might preclude maintaining a minimum viable bison herd. The agencies addressed this concern in a mitigating measure incorporated as a management objective in the final interim plan (Appendix A).

FINDING

The National Park Service proposes to implement Interim Bison Management Operating Procedures based on the Final Interim Bison Management Plan (Appendix A) to maintain a wild, free-ranging bison population and assist Montana in maintaining its brucellosis class-free status. In order to maintain a wild, free-ranging bison population while protecting Montana's brucellosis class-free status, the NPS should continue its cooperative management efforts with Montana because, in this case, NPS authority over and responsibility for wildlife, including bison, is limited to the lands within Yellowstone National Park. Outside Yellowstone National Park, the State of Montana has wildlife management responsibilities. The cooperating agencies can accomplish all actions prescribed in the final Interim Bison Management Plan and Interim Bison Management Operating Procedures under their respective existing authorities. Potential future activities not evaluated in this plan and EA and occurring in the Reese Creek area include a proposal from the Royal Teton Ranch to construct a bison proof fence along its boundary with Yellowstone National Park and the Gallatin National Forest to prevent bison movement onto its land. If the Royal Teton Ranch constructs a fence, the NPS will reevaluate the need for operation of a capture facility inside Yellowstone National Park in the Reese Creek area.

The Interim Bison Management Plan does not constitute an action requiring preparation of an environmental impact statement. The action will not have a significant effect on the human environment. Negative environmental impacts that could occur are minor and temporary in effect. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed on or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local law. Based on the above factors, an environmental impact statement is not required for this project and will not be prepared.

Recommended:

M.V. Zimley
Superintendent, Yellowstone National Park

8/5/96
Date

Approved:

John E. Oak
Director, Intermountain Field Area

8/5/96
Date

APPENDIX A
FINAL INTERIM
BISON MANAGEMENT PLAN



FINAL INTERIM BISON MANAGEMENT PLAN

The National Park Service (NPS), the state of Montana, United States Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), and USDA, Forest Service (USFS) will implement the interim bison management operating procedures pursuant to this final Interim Bison Management Plan. A summary and description of the final plan, including modifications resulting from public comment, follows. Each year the cooperating agencies will develop and sign interim operating procedures to coordinate activities prior to initiating management activity.

Agencies managing the bison that migrate from within Yellowstone National Park to public and private land within Montana will employ a variety of methods to prevent the potential spread of brucellosis from bison to domestic cattle, to reduce the potential for damage to personal property, to reduce threats to human safety, and to prescribe circumstances in which bison may freely range on adjacent federal lands where cattle are not present. This plan describes the bison management actions of the Montana Department of Livestock (DOL), Montana Department of Fish, Wildlife and Parks (FWP), NPS, APHIS Veterinary Services (VS), and USFS.

This plan identifies a site-specific management strategy for each of the locations in which bison traditionally move from Yellowstone National Park into Montana. Accordingly, management objectives vary for the Reese Creek, Eagle Creek/Bear Creek, Hellroaring Creek, Slough Creek, West Yellowstone, and Lee Metcalf Wilderness/Cabin Creek Recreation and Wildlife Management (Lee Metcalf/Cabin Creek) areas. This plan describes management direction for each area, the actions to be taken, and the state or federal agency with lead responsibility for the action. For some actions, more than one agency may be listed when those agencies have joint responsibility for the action, to the extent permitted by each agency's legal mandate and jurisdiction.

The goal of both NPS and DOL will be to conduct operations as outlined in the plan to provide spatial and seasonal separation of bison and domestic cattle in order to maintain Montana's brucellosis class-free status, while permitting the bison herd within the park to fluctuate, to the maximum extent possible, in response to natural ecological processes. The NPS and DOL will use the most feasible management actions to limit bison distribution or remove bison, as described in the plan. The NPS and DOL do not expect removals to exceed the range of those experienced since 1985. Should unusual circumstances develop that are beyond the range of environmental conditions experienced since 1984-85, the agencies may develop contingency plans to assure that removals of bison outside of cattle-free public lands in Montana do not compromise the integrity of the bison herd within Yellowstone National Park. Contingency plans would take into account weather conditions, bison population numbers, time of year, location and number of bison near the

Yellowstone-Montana border, logistical constraints, herd memory, and other relevant factors to determine what immediate changes in management direction, if any, the agencies should take. Within those contingency plans, the NPS and DOL will jointly cooperate and use some or all the management actions described in the plan (capture and slaughter, shooting, hazing, monitoring) in making every reasonable and practical effort to mitigate impacts of management actions on the environment. No removals will occur in the Eagle Creek/Bear Creek area, Hellroaring Creek and Slough Creek drainages, and Lee Metcalf/Cabin Creek area. These management actions and potential plans do not supersede state law which allows private landowners to remove bison from their property.

Eagle Creek/Bear Creek Area

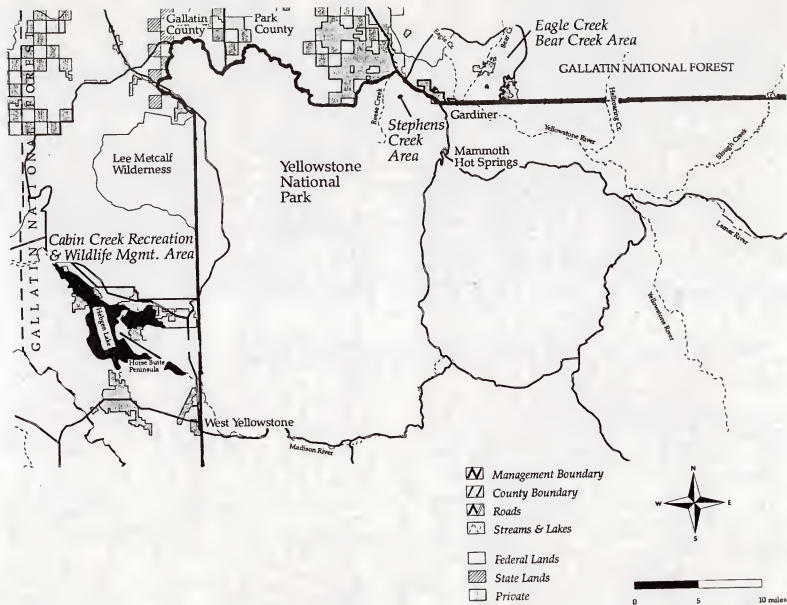
The management objective for the Eagle Creek/Bear Creek area is to limit the distribution of free-ranging bison to specified federal lands adjacent to Yellowstone National Park and to prevent bison from migrating farther onto private lands and other public lands. The land-use allocation on these federal lands precludes cattle and the topography tends to restrict bison to the public lands. The agencies will monitor bison activities and movements. The agencies will not remove any bison in the Eagle Creek/Bear Creek area (Figure 1) until the animals move north or west and approach the boundary between the Gallatin National Forest and private property in the vicinity of the Little Trail Creek-Maiden Basin hydrographic divide.

Monitoring-- Monitoring activities will include aerial or ground reconnaissance of individual bison or groups of bison. The NPS will monitor, record, and notify cooperating state agencies of bison activity within Yellowstone National Park. From June 1 to October 1, little monitoring will be needed, as few bison are expected to move toward the north boundary. However, monitoring activities may occur at any time of the year. Monitoring of bison near the north boundary area will occur during the winter months and will range in frequency from once per week to twice per day.

During winter months, the NPS will monitor and record the presence of all bison outside the park in the Eagle Creek/Bear Creek area twice per week. As bison approach the Little Trail Creek-Maiden Basin hydrographic divide, bison monitoring will occur daily. The DOL and FWP will assist NPS with the monitoring of bison in the Eagle Creek/Bear Creek area.

Hazing Operations-- The NPS, DOL, and FWP will attempt strategic hazing of bison to discourage bison from leaving the Eagle Creek/Bear Creek area or to move bison off of private land. Strategic hazing includes any management action designed to move bison into the Eagle Creek/Bear Creek area or move bison off of private land.

Figure 1. Map of Project area.



Shooting Operations-- The DOL will shoot bison approaching or migrating north or west of the Little Trail Creek-Maiden Basin hydrographic divide. The DOL will have primary authority for identifying and removing bison on private or public lands outside of Yellowstone National Park. At the request and under the authority of DOL, NPS personnel will assist in shooting operations outside Yellowstone National Park. The involved agencies will fully document all shooting operations.

This alternative is intended to prevent bison from leaving public lands and moving onto private lands. However, it is possible that bison may move long distances in a brief period and thus could migrate onto private lands. In these situations and at the request of private landowners, DOL, FWP, and NPS (at the request and under the authority of DOL) may use shooting to remove individual bison or small groups of bison on private lands in the Eagle Creek/Bear Creek area. Alternatively, Montana law allows private landowners to shoot bison on their land if livestock are present and if Montana agencies are unable to respond in a reasonable time.

Capture Operations-- The agencies will not remove any bison in the Eagle Creek/Bear Creek area using capture facilities.

Reese Creek Area

The management objective for the Reese Creek area is to prevent bison from leaving Yellowstone National Park in the Reese Creek boundary area and moving north onto adjacent private land where cattle are grazed. The NPS will use capture operations (located in the Stephens Creek area, Figure 1) as the primary method to prevent movement of bison onto adjacent private land. All agencies will use certified weed-free hay for all capture, handling, baiting, and feeding operations. Agency personnel will immediately remove bison that evade capture and leave Yellowstone National Park in this area.

Monitoring-- In the Reese Creek area, the NPS, DOL, and FWP will employ the general monitoring activities described above for the Eagle Creek/Bear Creek area.

Hazing Operations-- The NPS, DOL, and FWP may attempt strategic hazing of bison to discourage bison from leaving the park, to move bison back into the park, or to move bison farther into the park away from the park boundary. Because capture operations are the primary management activity, the NPS may also use hazing to capture migrant bison north of Stephens Creek in the Reese Creek area or to capture those bison initially evading the capture facilities.

Shooting Operations-- In the Reese Creek area outside of Yellowstone National Park, the DOL (with permission of the private landowner) will shoot bison that evade the capture

facilities and that cannot be hazed back into the capture facilities. Upon request and under the authority of DOL, NPS personnel will assist in shooting these bison. The involved agencies will fully document all shooting operations. All efforts will be made to retrieve bison carcasses resulting from shooting operations.

Capture Operations-- The NPS will use capture and shipment to slaughter as the primary method to prevent bison migration from Yellowstone National Park onto private lands north of the Reese Creek area. The NPS will maintain portable capture and handling facilities near the Reese Creek area within Yellowstone National Park.

Any capture and handling facility for bison will meet the following site criteria:

- Holding pastures, corrals, handling equipment, and wing fences (collectively called capture facilities) will be portable, temporary structures.
- Capture facilities will utilize existing road systems to allow for maintenance and operation of the facility and to allow transport of bison to slaughter facilities.
- Capture facilities will have an appropriate and adequate water supply for bison. Certified, weed-free hay will also be available for feeding bison if they are held in capture facilities for more than 24 hours.
- In accordance with applicable state and federal laws and regulations, cultural and natural resource inventories and assessments will be conducted in areas where capture facilities will be placed. Placement of the capture facilities will avoid any known significant or sensitive cultural resources.
- Ground disturbance will be kept to the minimum necessary for proper construction of the facilities.
- Placement of the capture facilities will avoid significant wetland and riparian areas and avoid areas having rare or sensitive plant species.
- Only one facility will be located inside Yellowstone National Park in the Reese Creek area.
- Facilities will be constructed and operated in such a manner that capture and handling of bison will be as humane as possible.

The NPS will operate the Reese Creek facility for the purpose of capturing all migrant bison at this location in order to assist Montana in maintaining its brucellosis class-free status. At the request and under the direction of the NPS, cooperating agencies will assist in the operation of the facility. Bison will be killed and processed at approved portable or permanent slaughter facilities outside the park boundary.

Distribution of Bison Carcasses-- The NPS may provide any bison captured inside Yellowstone National Park to the state of Montana or to Native American tribes or associations pursuant to federal laws or policies. The DOL will salvage all bison carcasses fit for human consumption that are obtained from management actions outside of Yellowstone National Park. The DOL will cooperate with social services organizations or tribal governments in exchange for assistance in processing the carcasses and distributing the meat. The DOL may also sell carcasses and use the revenue to offset DOL, FWP, and NPS operating costs. Some carcasses may also be used for approved research purposes. Additionally, the agencies may use some live bison, obtained from capture operations in the Reese Creek area, for approved research projects.

West Boundary Area

The management objective for the West Boundary area is to limit distribution of bison to Yellowstone National Park and certain public lands that are adjacent to Yellowstone National Park. The distribution of bison will be limited to times, situations, and locations in which the risk of brucellosis transmission from bison to cattle can be controlled.

The agencies will monitor bison movements and immediately remove or haze back into the park all bison that leave Yellowstone National Park in the vicinity of West Yellowstone, Montana, from May 1 through October 31. The DOL will maintain portable and temporary capture and handling facilities, potentially at several locations, at or near the Yellowstone National Park boundary in the West Yellowstone area. All cooperating agencies will use certified weed-free hay for all capture, handling, baiting, and feeding operations. From November 1 through April 30, the DOL will remove all bison that move onto private lands (with the consent of the private landowner) and restrict bison on public lands to males and non-pregnant females that have tested negative for *Brucella* antibodies.

Monitoring-- For the West Boundary area, the agencies will use the general monitoring activities outlined above for the North Boundary area, except as noted below. On a daily basis, the NPS will monitor bison inside the park near West Yellowstone. Three times per week, DOL, with assistance from FWP, NPS, and

USFS, will monitor and record the presence of all bison found outside the park in the West Yellowstone area.

Hazing Operations-- The agencies may attempt strategic hazing of bison to discourage bison from leaving the park, to move bison back into the park, or to move bison farther into the park away from the park boundary. Agencies may also haze bison to facilitate the capture of migrant bison in the West Yellowstone area. From May 1 through October 31, DOL may haze all bison in the West Yellowstone area back into the park.

Shooting-- With permission of the landowner, DOL may shoot all bison on private land at any time of year. From November 1 through April 30, DOL also may choose to shoot bison outside Yellowstone National Park that have evaded capture operations in the West Yellowstone area.

Capture Operations-- From November 1 through April 30, the DOL will employ capture operations to manage bison migrating from Yellowstone National Park to areas south of Grayling Creek/Fir Ridge in the West Yellowstone area. The DOL will erect and maintain portable and temporary capture and handling facilities at one or more locations at or near the Yellowstone National Park boundary in the West Yellowstone area for the purpose of capturing bison. APHIS will provide materials for at least one facility. Capture facilities in the West Yellowstone area will follow site criteria described for the capture facilities in the Reese Creek area.

The agencies will serologically test all captured bison in the field for the presence of *Brucella* antibodies. The DOL will send all serologically positive bison to approved slaughter facilities. Some bison selected for collection of blood and tissue samples for disease surveillance may be slaughtered on-site. All sero-negative pregnant female bison will also be sent to slaughter because the potential exists that some sero-negative, pregnant bison may develop a brucellosis infection and shed the brucella bacteria into the environment. During capture operations all sero-negative males and sero-negative, nonpregnant females will be identified with an electronic marker and an unobtrusive visual marker and the DOL will release these animals on-site.

The agencies may vaccinate released bison for brucellosis, but a safe, effective vaccine for bison is not currently available. Pending completion of studies on its safety and effectiveness, RB51, or any other vaccine, may be used on bison.

Collection of Blood and Tissue Samples-- The DOL will be responsible for collecting blood and tissue samples from bison that are slaughtered or shot for the purpose of disease surveillance or other research. The DOL will assure that appropriate personnel are on site to accomplish sample

collection. Personnel from the National Biological Service (NBS), APHIS Veterinary Services, FWP, and NPS may assist DOL with the collection of blood and tissue samples.

The DOL will collect tissue samples from all sero-negative, pregnant females using sampling protocols based on those developed by the Greater Yellowstone Interagency Brucellosis Committee (GYIBC). The APHIS VS and the National Biological Service, with assistance from DOL, FWP, and NPS, will provide qualified personnel to conduct necropsies and collect tissues. Veterinary Services will be responsible for all culture and serology samples and tests and will provide test results to all cooperating agencies. Logistic considerations that preclude collection of tissues samples from sero-negative, pregnant females will not constrain the slaughter of bison from the West Yellowstone area. Additionally, the agencies may use some live bison, obtained from capture operations in West Yellowstone area, for approved research projects.

Other Areas

Bison occasionally leave Yellowstone National Park in locations other than those where active management will occur. Generally, these bison use public lands in remote areas, in areas allocated to uses precluding domestic cattle, and in topographic situations precluding further migration. In these areas, the agencies will employ no management actions, other than monitoring. The agencies will monitor bison that move into the Hellroaring Creek, Slough Creek, and north of Grayling Creek/Fir Ridge areas in portions of the Lee Metcalf/Cabin Creek area (Figure 1). It is unlikely bison will move beyond those areas. If bison moved beyond those areas, agency personnel will haze or shoot those bison.

APPENDIX B

SUMMARY OF SUBSTANTIVE PUBLIC COMMENTS AND RESPONSES

TO THE

INTERIM BISON MANAGEMENT PLAN DRAFT ENVIRONMENTAL ASSESSMENT



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INTERIM BISON MANAGEMENT PLAN DRAFT ENVIRONMENTAL ASSESSMENT

SUMMARY OF COMMENTS

A total of 260 comments from state and federal agencies, Native American tribes, organizations, and individuals were received on the Interim Bison Management Plan Draft Environmental Assessment (EA) during the 42-day comment period that began December 20, 1995. The comment period was originally scheduled to end January 19, 1996, but due to requests from the public, the comment period was extended to February 2, 1996. Comments were received in the form of letters, postcards, and form letters.

Public involvement under provisions the National Environmental Policy Act (NEPA) is intended to gather substantive information and ideas from the public on proposed federal actions in order to help managers make better decisions. The public involvement process is not counting votes supporting or opposing management actions. While quantitative information is gathered and is important in assessing attitudes, that is only part of the information analyzed.

Many comments were statements of opinion registering opposition to or support of the proposed action and did not provide substantive input to correct errors, identify omissions, or improve the content of the EA. Comments providing substantive input to environmental issues, alternatives, or improvements of the EA were in the minority. All responses from agencies, organizations, and individuals were screened for major issues. Comments were sometimes used to illustrate issues or concerns and are quoted verbatim and presented exactly as written.

For this summary, comments from federal and state regulatory agencies and Native American tribes are presented first followed by comments from organizations and then individuals. Responses to substantive issues or questions follow the summary of the issue. Many times agencies, organizations, and individuals identified similar issues. In those instances, the issues will be addressed where they first appear.

SUMMARY OF FEDERAL AND STATE AGENCY AND TRIBAL COMMENTS

COMMENTS ON ALTERNATIVE 1. REVISED INTERIM BISON MANAGEMENT OPERATING PROCEDURES (PROPOSED ACTION)

This proposal calls for erecting a portable, temporary capture and handling facility inside Yellowstone National Park, near Gardiner, Montana, for the purposes of capturing all bison migrating outside the park boundary in the Reese Creek area. All captured bison would be sent to slaughter. A second capture and handling facility would be erected in the West Yellowstone area, and all bison testing positive for exposure to brucellosis would be slaughtered. All pregnant female bison would also be slaughtered. All other bison captured in the West Yellowstone area would be allowed to freely roam on public lands from November 1 through April 30. Bison found in the Eagle Creek/Bear Creek area northeast of Gardiner, Montana, would be monitored.

In general most federal and state agencies did not state an opinion of opposition to or support of the proposed alternative. Some state agencies including the Governor of Wyoming, Wyoming Department of Agriculture, Wyoming Livestock Board, and Wyoming Game and Fish Department stated that Alternative 1 — Revised Interim Bison Management Operating Procedures (Proposed Action) — was a biologically sound and politically acceptable interim solution. However, all tribal comments stated the preferred option should include a quarantine facility to be established by the InterTribal Bison Cooperative (ITBC).

"The Nez Perce Tribe does not believe the preferred option addresses the commitment Governor Racicot has made to the ITBC."

COMMENTS ON ALTERNATIVE 2 - CONTINUATION OF CURRENT INTERIM BISON MANAGEMENT PLAN

The second alternative describes current bison management. Under this alternative, the Montana Department of Livestock would shoot bison migrating into Montana that pose a threat to private property and human safety or potentially threaten Montana's brucellosis class-free status.

None of the agencies commented on Alternative 2. However, the Nez Perce Tribe stated the

"no action alternative as described in the EA represents an action rather than the maintenance of the status quo, which the Tribe believes is the true no action alternative."

NEW SUGGESTED ALTERNATIVES

No federal or state agencies suggested any new alternatives to be considered in addition to the two examined in the EA. However, new alternatives were offered in tribal comments. Although some are modifications of Alternative 1, all are listed here.

Alternative Suggestion #1 — Vaccinate For Brucellosis

The Shoshone-Bannock Tribes stated that livestock vaccination for brucellosis should be an alternative.

RESPONSE: Vaccination of cattle (using Strain 19) is a method of disease control practiced by the cattle industry. Despite Strain 19 vaccine being less than 100% effective and no mandatory vaccination requirement for Montana cattle, a very high percentage of replacement heifers are voluntarily vaccinated. In Montana, approximately 400,000 doses of vaccine are administered annually, including 200,000 doses needed for replacement heifers each year. Vaccinated heifers sell for more money than non-vaccinated heifers.

Montana regulations require that all female cattle imported from other states be vaccinated for brucellosis. Fifty percent of the cattle grazed in the West Yellowstone area during summer come from Idaho. Approximately 95% of the ranchers that graze livestock in the Yellowstone area during summer vaccinate their cattle. Therefore, nearly all of the female cattle in the Yellowstone area are vaccinated.

Vaccination for brucellosis in cattle is not like vaccination for small pox in humans. A strong challenge to vaccinated cattle, such as exposure to an infected, aborted fetus with billions of bacteria, renders the vaccine only 65% effective. With a strong *Brucella abortus* challenge, one of three vaccinated cattle could become infected with *B. abortus* and could infect other cattle in the herd.

In addition to the biological threat *Brucella abortus* poses, this disease is managed under federal and state regulations. When a single cow is found to be infected with brucellosis in a brucellosis-free state, the entire herd is quarantined and depopulated. The price paid for the entire herd including the federal and state indemnity, is insufficient to provide the necessary capital for replacement of the herd. If the disease spreads to another livestock herd or if a herd is found to be infected within a state and a state does not address either problem through control or elimination methods, that state could lose its Brucellosis Class-Free status.

Alternative Suggestion #2 — Restoration/Relocation Of Bison To Native American Herds Or Private Herds

The Nambe Pueblo Oweenge, the U.S. Bureau of Indian Affairs, Wind River Indian Agency, the Choctaw Nation of Oklahoma, the Lower Brule Sioux Tribe, the Shoshone-Bannock Tribes, the Nez Perce Tribe, the Northern Arapaho Business Council, the Winnebago Tribe of Nebraska, and the ITBC responded that they would prefer the bison were captured, tested, quarantined, and then distributed to tribes.

"The ITBC proposes...that the bison which exit Yellowstone National Park be captured and quarantined, until such time that the animals may be determined unequivocally to be incapable of transmitting brucellosis...the animals which successfully complete the quarantine would be transferred to American Indian Reservations...If we can obtain the approval and endorsement of the cooperating agencies, the ITBC will commit to pursuing and obtaining the funding necessary for the acquisition and development of a quarantine facility."

RESPONSE: The cooperating agencies agree that distribution of live bison to cooperating tribal governments, stocking of bison on other public lands, or sale of live bison should be considered as an alternative to transporting bison to slaughter. However, the cooperating agencies have agreed that bison from Yellowstone that have been exposed to brucellosis must be quarantined before distribution. APHIS, in response to the interest expressed by tribes and other organizations for live distribution of bison, has initiated the administrative process to amend the Brucellosis Eradication Uniform Methods and Rules (UM&R) and the Code of Federal Regulations. These amendments will be required before agencies, organizations, or individuals may operate a bison quarantine facility in an otherwise brucellosis-free state. Siting and operation of a quarantine facility may have significant environmental effects and is beyond the scope of the 1995 Interim Bison Management Plan Environmental Assessment. The issue of quarantine and live distribution of bison will be addressed in the Environmental Impact Statement.

RESPONSES TO MAJOR ISSUES OF CONCERN

LIVESTOCK AND PROPERTY PROTECTION

The few comments received about Livestock and Property Protection and the related issue — Loss of Brucellosis Class-Free Status — were all from state agencies. The State of Idaho commented that Alternative 1 was most likely to prevent damage to private property, the livestock industry, and human safety but was also concerned that the management procedures proposed in the EA would not eliminate all risk and thus

"may not be sufficient to prevent continued sanctions against Montana cattle."

The Wyoming Department of Agriculture stated that their primary interest was to

"see that the State of Montana can maintain its class-free status and protect livestock owners who adjoin the park"

and they will continue to provide active support for Alternative 1 as long as APHIS agrees that its implementation will protect Montana's class-free status.

ERADICATION OF BRUCELLOSIS

Some state agencies commented that Alternative 1 was a step in the right direction toward brucellosis eradication. However, the Nez Perce Tribe questioned how brucellosis could be eliminated from

"the United States if Yellowstone remains as a vast reservoir of the organism ... Are the inconsistencies a result of a clash of agendas among the Cooperators that have not fully been resolved? Are these the type of concerns you plan to address in the EIS rather than in this EA?"

TRANSMISSION OF BRUCELLOSIS

Two tribes commented that because the EA, as required by the Council on Environmental Quality, fails to document credible scientific information about brucellosis transmission relevant to the discussion of reasonably foreseeable impacts, justification is lacking for proposed management actions. They also stated the evidence presented in the EA does not support the assertion that National Park Service and State of Montana actions have prevented brucellosis transmission. The Nez Perce and the Winnebago Tribe questioned the rational for dealing with bison as an agent of brucellosis dispersal and not elk,

"especially ... when transmittal of brucellosis from bison to cattle has not been documented".

These tribes also wondered if this was a disease problem or simply a population management concern?

"Provided the unknowns regarding transmission and likelihood of effect, it is impossible to show that management actions are in fact eliminating transmission. The NPS should specifically identify how this conclusion was reached and provide supporting details."

"the EA infers brucellosis was introduced to the Park through animal transfers and subsequently spread from the park through animal transfers. Circumstantial evidence is presented. Is there documentation the bison brought to the park were infected or the animals transferred out of the park that were later found to have brucellosis, were actually infected while in the park?"

RESPONSE: There is considerable disagreement about the potential for brucellosis transmission from wild bison to domestic livestock. Current

scientific information is insufficient to either quantify the risk or to resolve the disagreement. Brucellosis is endemic in this bison herd. Therefore, Montana has determined active management of bison distribution is required to maintain Montana's compliance with Title 9 Code of Federal Regulations and UM&R.

The Interim Bison Management Plan prescribes different management objectives and strategies for different locations based on the possibility that bison might associate with permitted cattle in those locations or potentially contaminate areas that soon will be occupied by permitted cattle. No action is required to remove bison that use remote areas or public lands that have been allocated to uses that preclude cattle. At the other extreme, the Interim Bison Management Plan precludes the presence of bison on private lands because, in addition to the concern for damage to private property, cattle may occur on these lands at any time.

Disagreement about the risk of transmission involves the presence of bison on national forest lands in the vicinity of West Yellowstone. This area includes a federal grazing allotment permitting cattle grazing from June 15 through

September 15 each year. Additionally, cattle are pastured on some private lands in the West Yellowstone area.

The Interim Bison Management Plan prescribes a tolerance, during the cattle free period (November 1 through April 30), for low-risk bison. Low-risk animals, for the purpose of this plan, are those bison that, without any question, are incapable of transmitting brucellosis from the time of capture until the following April 30. Low-risk animals include all test negative males and all test negative, non-pregnant females.

The test for brucellosis is an immune response, i.e. it detects antibodies produced in response to the current or former replication of *B. abortus* in cattle or bison. It is therefore assumed that, irrespective of gender, individual bison testing positive for brucellosis have previously experienced infection and may yet be a host for the disease.

Pregnant females are considered to be a risk because the infectious stage of brucellosis typically occurs during pregnancy. It is possible for these animals to have been exposed to brucellosis prior to capture, test negative for brucellosis, and then, without subsequent exposure, develop active infections and shed the organism.

HUMAN SAFETY

A few state agencies commented that Alternative 1 would most likely protect citizens from brucellosis-infected bison. The National Park Service was concerned that the typical portable corrals employed in handling cattle would not be adequate for mature bison and could prove ineffective and possibly dangerous to both bison and personnel involved in the operation.

RESPONSE: While it is true humans can contract brucellosis (undulant fever in humans) through consumption of unpasteurized, infected milk products or contact with infected tissues, brucellosis in humans is rare. Brucellosis in humans is not a serious public health hazard. The large majority of cases of brucellosis in humans is caused by *Brucella* species such as *B. suis*, not *B. abortus* found in Yellowstone bison (see page 17 of the draft EA). Considering the millions of people that have visited Yellowstone and the hundreds of people that have captured, handled, or slaughtered bison in Yellowstone, we are not aware of a single documented case where humans contracted brucellosis from Yellowstone bison.

The proposed capture and handling facilities would be designed for use on wild bison and constructed of stronger and heavier duty materials than those used for domestic cattle. A portable corral design was chosen in part because this proposed action was intended to be a temporary or interim solution for handling bison migrating from Yellowstone into Montana. All available measures will be used to make the capture and handling facilities and temporary holding facilities as safe as possible for the bison and the agency personnel involved in any possible capture operation. Human safety will be stressed during all phases of capture operations and at no time will the safety of personnel be compromised to carry out an operation. However, as is the case in handling any wild animal, bison are large and powerful and accidents could happen.

BISON RESOURCE PROTECTION

There were many comments from agencies and tribes about bison ecology and biology, carrying capacity, animal welfare, and bison management procedures and strategies. The Governor of Wyoming, the Wyoming Livestock Board, and Wyoming Game and Fish Department were concerned that the issues of

"bison management, excessive populations, and the high incidence of brucellosis infection within the park are not adequately addressed and must be addressed in the final analysis."

The Shoshone-Bannock Tribes were concerned about maintaining a free-ranging, harvestable population of buffalo outside the park and stated

"[t]he data presented in the EA was insufficient to determine the nature and extent of the population expected or anticipated outside of the Park"

and should show removals or total winter buffalo counts outside of Yellowstone as they relate to land ownership, herd composition, and time of migration.

Furthermore they stated the nature and extent of migration should be defined in order to determine the likelihood, on any given year and during specific climatic conditions, in which buffalo migrate out of the park. Both the tribes and the agencies commented on animal welfare. The tribes stated respect for the bison was a major consideration which was lacking in the present policy and any new proposed policies. Rich Klukas of the National Park Service noted that there were considerable problems with bison breaking off their horns and on occasion breaking legs with the use of portable corrals.

The state agencies and the tribes had concerns about bison management procedures and strategies. The State of Idaho was concerned that hazing would do nothing more than scatter bison and make them harder to trap, ultimately resulting in shooting. They stated hazing should be used only to move animals into traps and not to keep them in the park or away from the park boundaries. The Wyoming Attorney General was concerned about restricting hazing operations from May 1 through October 31 and stated hazing should be allowed in other months if emergencies exist. The Shoshone-Bannock Tribes were concerned that hazing would not allow migration to public lands and requested the NPS preclude hazing (except to assist with capture, testing, and release) from November 1 through April 30.

RESPONSE: The agencies are concerned with humanely managing bison. Female bison and calves usually move in groups of 25 to 30. Bulls are usually in smaller groups, and older bulls can be solitary animals. The easiest bison to capture will be cows and calves and younger bulls because they are less aggressive, have a calmer disposition, are smaller in size, and they are in larger groups and not solitary. A decision to capture may be delayed until an adequate number of bison are available. Captured bison would be separated into different sex and age groups for working in chutes, tagging, blood testing, and hauling. Old bulls may be hauled or worked in the capture facility as single animals and not commingled, if possible, with other animals. All possible precautions will be taken to assure animals are handled humanely and with the least possible trauma.

When bison in West Yellowstone are captured, they will be blood tested. The negative bulls and negative non-pregnant females will be identified with an ear tag that is visible from a short distance. All non-marked bison on public land outside of the park will be killed or hazed back to the park or capture facility.

It will be impossible to capture every bison that leaves the park. Shooting operations will continue in West Yellowstone when bison evade the capture facility, when bison are determined to be too aggressive (large old bulls), when they are a threat to private property or human safety, or when they occupy private property and are requested to be removed by the property owner. In the Eagle Creek/Bear Creek area, any bison that move north or northwest of the Maiden Basin-Little Trail Creek hydrographic divide will be shot. Those that escape capture in the Stephens Creek area and move onto the Royal Teton Ranch will be shot. All shooting activities will be documented. The highest percentage of escaped bison will be older bulls as these animals are often solitary and less amenable to hazing. As explained in the EA (pages 10 and 13), bison carcasses from shooting operations would be distributed to social services organizations or tribal governments in exchange for assistance in processing the carcasses and distributing the meat.

Gut piles will be allowed to remain on private and public property when no possibility exists of human-bear conflict, provided permission has been granted by the land owner or the USDA Forest Service. Historically, coyotes, ravens, and eagles have utilized the gut piles for winter forage and consume most of the tissues within a week. All female bison reproductive tracts and fetuses will be removed. The route of transmission of brucellosis to humans is normally through contact with reproductive tissues and fluids as the organism grows most rapidly and is found in the highest concentration here.

The National Park Service, Montana Department of Livestock, Montana Department of Fish, Wildlife and Parks, USDA APHIS, Veterinary Services, and the National Biological Service will continue to sample selected bison for the presence of *Brucella abortus* using protocol designed by the technical committee of Greater Yellowstone Interagency Brucellosis Committee and approved by the veterinary pathologists at the National Veterinary Services Laboratory. In addition, other possible opportunities for advancement of knowledge about the disease in bison through applied research are being pursued (see responses on pages 37 and 61, NEED FOR RESEARCH AND MONITORING).

In addition, the tribes were concerned that tribal subsistence hunting imposes a much higher cultural standard upon harvest methods and use than the Park Service has considered and that using tribal members in the harvest may be the only method that meets these concerns.

"...There is no analysis ...about what harvest level is anticipated or even desirable under the preferred alternative and its potential impact on the bison population in the park. How far can the population deviate from the current trend of increasing and still reach FONSI (Finding Of No Significant Impact)? We are looking for a description of the change that is expected from the status quo and a discussion of its impact to the bison herd as a whole."

"Does the State of Montana plan to manage bison, outside the park on private or federal lands, if they are free of brucellosis, as a game animal? Is the State prepared to see free roaming herds of bison in the state if the disease problem is resolved?"

RESPONSE: Regarding the effects of harvest on the bison population, see responses on page 13, DISTRIBUTION OF LIVE BISON, and page 30, BISON RESOURCE PROTECTION, Carrying Capacity.

The Montana Codes Annotated (M.C.A.) distinguish between wild bison from herds that are infected with a dangerous disease [81-2-120 (1), M.C.A.; 87-1-216 (1)(a), M.C.A.] and bison that are not exposed or infected with a dangerous or contagious disease but may threaten persons or property [87-1-216 (2)(a)]. Dangerous diseases are those which may spread to persons or livestock. The M.C.A. specify that bison with dangerous diseases, including bison that originate from Yellowstone National Park, be managed as a species requiring disease control. Bison that have not been exposed to or infected with a contagious disease would be managed as a game animal.

RESOURCE MANAGEMENT/OTHER RESOURCE PROTECTION

Federal and state agencies, and tribes commented on the impacts on wildlife including threatened and endangered species; impacts on vegetation including wetlands; and impacts on cultural and spiritual issues. The USDA Forest Service, Gardiner Ranger District commented that Alternative 1 may decrease a potential source of food for grizzly bears, bald eagles, and wolves at locations other than the boundary line. The U.S. Fish and Wildlife Service stated

"The Service has reviewed the draft environmental assessment and concurs with the determinations that the proposed actions will have no effect or are not likely to adversely affect the threatened bald eagle (*Haliaeetus leucocephalus*) or grizzly bear (*Ursus arctos horribilis*), the endangered peregrine falcon (*Falco peregrinus anatum*), or the non-essential experimental gray wolf (*Canis lupus*)."

The USDA Forest Service, Hebgen Lake Ranger District was concerned that baiting traps with hay would become

"an attractant for other ungulates, especially elk"

and might result in a significant impact.

The Montana Historical Society recommended that any cultural resources be avoided if possible and the

"Eligibility of those which may not be avoided ... be formally resolved before we consider an Effect Finding."

They also noted that specific facility developments may not have been included in the survey areas. Yellowstone National Park Chief of Maintenance was concerned about damage to the cultural integrity of the Stephen's Creek Area. The Shoshone-Bannock Tribes stated

"The importance of the buffalo to the Tribes cannot be overstated, not only for subsistence needs but also for cultural needs."

RESPONSE: For impacts to endangered species, see analysis Impacts on Threatened and Endangered Species, page 21 of the EA and response on page 17, CORRECTIONS (ERRATA).

Regarding the issue of baiting during capture operations, only a sufficient amount of hay would be used to effectively capture those bison being targeted. Hay would only be used for the specific capture operation and excess hay the bison did not consume would be removed from the area following completion of the capture operation. Please see Appendix A, Interim Bison Management Operating Procedures, page 41 of the EA.

As stated in the draft EA, all cultural resources would be avoided (see Capture Operations, Page 9). The Montana State Historic Preservation Office and Advisory Council determined the proposed actions would not adversely affect cultural resources. Based on historic information on the Stephens Creek area, the existing structures in the area, and advice from the Cultural Resources Specialist in Yellowstone, it was determined the proposed capture facilities will not adversely affect the cultural integrity of the Stephens Creek area.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

Regarding NEPA, Native American Tribes were concerned that the tribes, collectively or individually, had not been represented in the preparation of the EA. The Shoshone-Bannock Tribe commented they were concerned the EA failed to recognize and or account for, as required by the CEQ, the off-reservation treaty rights. The Nez Perce tribe stated that

"under NEPA the analysis should be the changes in management from the status quo, which was already evaluated in the last NEPA review, rather than evaluating the impacts of all bison management thus the EA did not analyze the consequences of managing bison in Yellowstone."

"The CEQ guidelines for implementing...(NEPA) require the lead agency to identify possible conflicts between the proposed action and the objections of Indian tribes ...that the tribes call to the attention of the Park Service and the cooperators."

RESPONSE: Representatives from 16 Native American tribes with interests in the Greater Yellowstone Area were contacted during the first week in November and were notified that a draft interim bison management plan was

being prepared and that we were seeking comment on the plan. The tribes were again contacted during late November and early December and notified of a delay in preparation of the EA but that the EA was expected to be available for review the third week in December. On December 20, 1995 the EA was mailed to the 16 tribes and any others expressing an interest in bison management in Yellowstone. In addition the EA was sent to the InterTribal Bison Cooperative seeking comment on the draft EA. We continue to encourage and welcome tribal involvement and participation in the NEPA process involving bison management in the GYA.

We thank the Shoshone-Bannock Tribes for identifying the off-reservation treaty rights involving hunting on unoccupied land of the United States. Hunting is not allowed in Yellowstone National Park and the State of Montana currently does not authorize hunting of wild bison within its borders. The State of Montana also does not currently have management plans providing for harvestable populations of bison outside of Yellowstone National Park. The proposed action in the EA does not consider hunting as an interim management alternative, but hunting and off-reservation treaty rights will be considered in the long term bison management plan and EIS.

The no action alternative described in the EA is the current management plan through which the State of Montana and the NPS are operating. In this plan, the Montana State Veterinarian determines when and where bison that migrate into Montana from Yellowstone National Park should be removed either by shooting or hazing. At the request and under the authority of the Montana Department of Livestock, NPS personnel can participate in shooting operations. NPS personnel also initiate hazing operations within the park for bison in or near park boundaries as necessary. NPS also monitors bison locations and movements at or near Yellowstone National Park boundaries and reports those movements to the Montana Department of Livestock.

Our analysis of the cultural and ethnographic issues related to this interim plan indicate the proposal will not have effects on those issues. We have solicited comments from many tribes and tribal organizations and have identified and analyzed concerns of the tribes regarding the proposed action.

FINANCIAL IMPACTS

The one comment regarding financial impact was from a tribe stating the impacts of unlimited harvest of bison, linked to the Department of Livestock's ability to sell meat were not described, therefore it is difficult to determine whether the proposed action will have significant impacts.

RESPONSE: See response on page 14, DISTRIBUTION OF BISON CARCASSES.

PUBLIC ENJOYMENT AND EXPECTATIONS/PERSONAL VALUE

The Hebgen Lake Ranger District stated that

"...managers concerned and involved with this issue need to understand that visitors to the West Yellowstone area and specifically the Horse Butte area, have come to expect the opportunity to view and enjoy bison. This expectation is especially true during the winter months but there is also an expectation for the spring and early summer months."

They noted their comments were not substantive but were offered to make the final EA more factual.

NEED FOR RESEARCH AND MONITORING

The State of Idaho was concerned with the release of brucellosis exposed sero-negative bulls and non-pregnant females in the West Yellowstone area but stated they would support alternative 1 if the bison were closely monitored.

DISTRIBUTION OF LIVE BISON

In general, all of the tribes were concerned that the distribution of live bison was not addressed in the EA. The Nez Perce tribe stated that Governor Racicot had taken an important step in committing the State of Montana's support of the establishment of a quarantine facility and this was not addressed. They stated the use of land acquired by the ITBC should preclude the need for an EIS to approve this option.

At least one tribe noted there is a reference on page 4 that this plan does not include transferring bison except for research purposes. What are the live bison research purposes?

The tribes were concerned that killing bison without an EIS was an irrevocable commitment of resources that would preclude them from ever receiving live bison. Furthermore, the Shoshone-Bannock Tribes commented they were concerned with the genetic implications of long-term bison management without the introduction of non-related, breeding animals into the herd and live distribution would solve this concern.

"What assurance is there the EIS will be completed? To make this pledge come true the implementation of actions under the EA must not represent an irrevocable commitment of resources. The Nez Perce Tribe believes the harvest of bison is an irrevocable commitment of resources. Which, to the Tribe means the quarantine facility must be part of this solution and not wait for the completion of an EIS."

RESPONSE: Regarding quarantine and distribution of live bison, see response on page 4, NEW SUGGESTED ALTERNATIVES, Alternative Suggestion #2-Restoration/Relocation Of Bison To Native American Herds Or Private Herds.

Regarding the use of bison for research purposes, see response on page 37, NEED FOR RESEARCH AND MONITORING.

As stated in a court settlement agreement between the State of Montana, USDA APHIS, the National Park Service, and the USDA Forest Service, the draft EIS will be completed by November 15, 1996 with the final EIS due May 1, 1997.

While some people may dislike removal or slaughter of individual bison in or near Yellowstone, anticipated removal of some bison is not projected to impact the bison population. Indeed, with past removals (see corrected and revised Table 1), the bison population has continued to increase since 1985.

DISTRIBUTION OF BISON CARCASSES

Most of the tribes commented that as much of the slaughtered bison as possible should be given to Native American Tribes so that the meat can be distributed to tribal members. Some were concerned that carcasses should be distributed first to Native American tribes, especially those tribes with reserved treaty rights in the area. They also commented they would like the consideration of Native Americans and their traditions in the slaughtering process.

In addition, The Nez Perce Tribe stated it was

"...extremely alarmed that the National Park Service would participate in any action facilitating various departments of the State of Montana to obtain and sell Bison carcasses to raise money to offset the cost of the bison management program ...the option to sell carcasses should be eliminated from the EA since we believe it, by itself, will prevent you from reaching a Finding of no Significant Impact [FONSI]."

RESPONSE: The Interim Bison Management Plan includes several options for the distribution of bison carcasses (including heads and hides). The agencies intend to salvage all bison carcasses that are fit for human consumption. Cooperative agreements with social services organizations or tribal governments would be used as a means to exchange bison carcasses, heads, and hides for the cooperator's voluntary assistance with capture, handling, or processing operations. The cooperator would be responsible for distributing bison meat to qualifying people. Public auction of slaughtered bison would be used to recover some costs when assistance from cooperators is not feasible. The agencies anticipate that operating costs will exceed revenues from public auctions.

Table 1. Total parkwide winter bison counts and bison management removals outside Yellowstone National Park, 1975-76 to 1995-96.*

Winter	Total winter bison counts	Management removals outside Yellowstone National Park		
		West Boundary	North Boundary	Total Removals
1975-76		0	8	8
1976-81		0	a few bulls	a few
1981-82		0	0	0
1982-84		0	0	0
1984-85	2,114	0	88	88
1985-86	2,291	16	41	57
1986-87	2,433	7	0	7
1987-88	2,644	37	2	39
1988-89	3,159	2	567	569
1989-90	2,606	3	1	4
1990-91	3,178	14	0	14
1991-92	3,426	22	249	271
1992-93	3,304	79	0	79
1993-94	3,551	5	0	5
1994-95	3,956	119	307	426
1995-96	3,398	344	26	433 ^b

*From M. Meagher, 1993 unpubl. data; M. Meagher, pers. commun., Montana Department of Fish, Wildlife and Parks unpubl. data.

^bAs of June 11, 1996.

CONSULTATION AND COORDINATION

Both the agencies and tribes commented on consultation and coordination issues. The Gardiner Ranger District was concerned that it was not listed as a participant in the monitoring activities in the Eagle Creek/Bear Creek Area. The Wyoming Attorney General stated that they were concerned about the adversity between Game and Fish and the Wyoming Livestock board because Wyoming does not have legislation assigning primary management responsibilities to the Livestock Board. The tribes stated that because buffalo were so important to their culture, they should be involved in any management plans

involving bison and their consultation should have been solicited earlier in the process. Most of the tribes requested that the ITBC be designated and provided "cooperating agency" status.

"We want the Nez Perce Tribe and other Tribes to be part of the solution of the Yellowstone Bison Management concern rather than simply an interested bystander or a consumer of meat from harvested animals."

"It is apparent at a glance that someone referred to as 'Tribal Chairperson' may have been consulted once by phone but has certainly not "assisted in coordinating the preparation of this document as is asserted...We recommend this section be converted to a table listing the point of contact at each Tribe and the date of the contacts with the list of preparers. The coordination extended will be clearly depicted then."

"Certain member tribes of the ITBC maintain treaty-guaranteed rights to access Yellowstone Park and its resources. Other member tribes maintain treaty protected rights to access bison where they may occur on public lands ... However, up to this point, up to and including the development of this Environmental Assessment both Tribes and the ITBC have been shut out of the process."

RESPONSE: In the final interim operating procedures, the Gardiner Ranger District (USDA, Forest Service) will be listed as a participant in monitoring activities in the Eagle Creek/Bear Creek area.

As stated previously (see response on page 11 to NEPA), 16 tribal representatives were contacted and made aware of the preparation of the draft EA beginning the first week in November. Tribal representatives were again contacted in late November and early December and made aware of the status of the EA. During contacts, tribal representatives were encouraged to provide comments on the EA or any other issues regarding bison management.

The InterTribal Bison Cooperative is a private organization without legal authority. While their participation in the NEPA process is encouraged and comments on environmental documents are welcomed, CEQ does not provide for cooperating status to private organizations.

The Nez Perce tribe is correct that the tribal contacts listed under consultation and coordination section did not prepare the environmental assessment. The tribes listed in the Consultation and Coordination section of the draft EA were contacted and notified of the preparation of the EA, sent the EA, and asked to comment on the EA. We thank all tribes and the InterTribal Bison Cooperative for providing comments on the EA.

CORRECTIONS (ERRATA)

This section contains any comments received regarding corrections, omissions, or information to improve the content of the EA. The Hebgen Lake Ranger District proposed,

in the "Livestock Abundance and Distribution" section, changing the description of the cattle allotments and cow/calf pairs on the public lands in the vicinity of West Yellowstone and adding a statement about the number of cattle grazing on private land in the Denny Creek/South Fork and Horse Butte areas. They also suggested deleting the word 'marginal' from the description of West Yellowstone winter habitat.

The Gardiner Ranger District stated that some of the material presented in the EA was unclear. For example, were blood and tissue samples to be collected in the West Boundary Area only? Can private property owners in the Eagle Creek/Bear Creek area only shoot bison under certain circumstances or others as well? Will involved agencies document shooting operations in other areas in addition to the Eagle Creek/Bear Creek area? They stated the EA would be easier to understand if the points in common in the areas were presented first. They also commented the document did not indicate the expected impact on federally listed plant species. In addition they asked whether a

"...Biological Assessment [will] be written for the preferred alternative in accordance with Section 7 of the ESA?"

Yellowstone National Park Chief of Maintenance had three concerns for the Stephens Creek area: 1) the water distribution system at the proposed capture facility, 2) the disposition of gut piles, and 3) whether the capture facilities would be removed each summer?

RESPONSE: In the Livestock Abundance and Distribution section of the EA, the following paragraph, provided by the USDA Forest Service, should be substituted for the last paragraph in this section.

"There are four active cattle allotments on public lands in the vicinity of West Yellowstone that are within seven miles of the boundary of Yellowstone National Park. The Horse Butte allotment permits 172 cattle (cow/calf pairs) from 6/15 to 9/15. The Basin allotment permits 16 cattle (cow/calf pairs) from 7/21 to 9/19. The Sulphur Springs allotment permits 41 cattle (cow/calf pairs) and 8 heifers from 7/1 to 9/30. The South Fork allotment permits 19 cattle (cow/calf pairs) from 7/1 to 9/30. For the Wapiti allotment located north of the Cabin Creek Management Area, 222 cattle (cow/calf pairs) are permitted from 7/11 to 10/10.

Additionally, cattle also graze the private lands in the vicinity of West Yellowstone. Heaviest concentrations of these cattle are in the Denny Creek/South Fork and Horse Butte areas. These cattle are generally present from June 1 to November 15 and collectively may number 800 to 1,000 head."

Considering the description of winter habitat for bison in the West Yellowstone area, we agree that the term "marginal" may be inaccurate. We acknowledge bison have used the West Yellowstone area during the winter for over 15 years.

This EA did not indicate the expected impact on federally listed plant species. However, as stated on page 9 of the EA, "Placement of capture facilities would avoid significant wetland and riparian areas and avoid areas having rare or sensitive plant species." With this provision, we believe the proposed action will not significantly impact listed plant species.

The U.S. Fish and Wildlife Service prepared a biological evaluation regarding the proposal and determined the proposed actions "will have no effect or are not likely to adversely affect ..." the bald eagle, grizzly bear, peregrine falcon, or the non-essential experimental gray wolf. Whooping cranes do not occur in the project area.

Water will be provided for bison in the capture facility at Stephens Creek. Efforts will be taken to prevent the freezing of water lines and appropriate containers will be used to provide water to the animals. At Stephens Creek and West Yellowstone, all bison to be slaughtered will be shipped to slaughter facilities where gut piles will be disposed of properly. In the event bison would be shot outside the capture facilities, gut piles will be collected and disposed of properly.

Capture facilities at Stephens Creek will not be removed each summer. Associated drift fences will be removed but the posts and poles will remain until implementation of a long term bison management plan.

APHIS disagrees with the statement in the EA that APHIS has determined the provisions of the settlement agreement are sufficient to maintain Montana's compliance with 9 CFR Part 78 and states it is in the process of amending the necessary documents.

APHIS states that the background information

"Both recipient herds were eventually found to be infected with brucellosis, but no attempts were made that determined the source of the disease was bison from Yellowstone National Park"

and would like it changed to

"Both recipient herds were later found to be infected with brucellosis."

APHIS also stated that prior to 1983, CFR rules did not allow states to be classified as Certified Brucellosis-Free Areas if infected herds remained within the state. APHIS states that the new classification system was initiated in 1982. Finally, APHIS states that there are 34 not 33 states that are Brucellosis-Class Free.

RESPONSE: Under the lawsuit settlement agreement, APHIS agreed not to initiate a downgrade of Montana's Brucellosis Class-Free status due to presence of bison migrating from Yellowstone National Park into Montana as

long as Montana complies with its responsibilities in the Interim Bison Management Procedures. However, APHIS believes the provisions of the agreement are not sufficient to maintain Montana's compliance with 9 CFR Part 78 until appropriate changes are made to the CFR and UM&R; APHIS has initiated those changes.

In response to the issue regarding background information, APHIS would agree with the sentence in question if the second phrase is changed so that the entire sentence reads, "Both recipient herds were eventually found to be infected with brucellosis, but the source or sources of infection were never identified."

Regarding disposition of gut piles, collection of blood samples, and shooting operations, see response on page 8, BISON RESOURCE PROTECTION.

The Nez Perce tribe stated

"the interim operating procedures" mentioned in the last paragraph of page 3 are not delineated. Is this a reference to the preferred alternative?"

They also stated there should be some discussion of the nature of brucellosis since blood serum tests for antibodies were higher than tissue tests for infection.

"It is not explained why animals must be butchered based on a positive serum results when the actual infection rate is low."

They suggested changing the tense describing Native American tribes frequenting the Yellowstone area from past to present as

"the past tense tends to indicate Tribes are not present today."

They stated this section could also at a minimum, acknowledge the Nez Perce Trail traversing the Park and that the Nez Perce fought part of the war within the Park.

"This section does not do justice to the richness present within the archeological record for the area. We expect a Cultural resource section to dwell longer on the previous 10,000 years than it does on the last 150."

Furthermore,

"[f]or further reference the Chairman of the Nez Perce Tribe is Samuel N. Penny. His title is Chairman of the Nez Perce Tribal Executive Committee."

RESPONSE: The Interim Operating Procedures are a detailed description of the proposed action, Alternative 1.

Testing a brucellosis-affected cattle or bison herd characteristically results in more seropositive animals than culture positive animals. One reason is that *Brucella abortus* is an intracellular organism which can exist in a dormant state in the lymphatic system or reproductive system. The course of *B. abortus* infection is better documented in cattle than in bison, so knowledge of brucellosis in cattle is used to hypothesize many aspects of how the disease acts in bison. Typically, the organism does not exit the cells and multiply until stimulated to do so in late pregnancy, or possibly by sexual maturity in males. Even then, a bovine female or, presumably, bison female that has been infected for many years may have developed an immune response that severely limits the newly-stimulated infection. Under such conditions, cultures from an infected female bison could be negative even though the animal is seropositive.

Serological tests are routinely used to determine whether animals (or people) have been exposed to particular antigens. Accordingly, when used correctly, serological tests are very reliable for identifying animals that have been exposed to *Brucella abortus* antigens. Seropositive animals may or may not be harboring the organism and serological tests alone are not sufficient to make that determination. Serological testing is most reliable when the results of several tests are evaluated together. Based on knowledge of brucellosis in both cattle and bison, test reliability in female animals of reproductive age is further increased by testing blood collected approximately 30 days after calving or abortion. When a battery of serological tests is used with herd history and epidemiological investigation, the combination is extremely effective in identifying affected cattle or bison herds. It should be noted that strain 19 vaccination complicates interpretation of these serological tests in cattle and bison, so the tests are much easier to interpret in herds that have not received strain 19 vaccine, such as the Yellowstone and Jackson bison herds.

Based on the hypothesized similarity between brucellosis in cattle and brucellosis in bison, some bison could be infected but test seronegative and culture negative. *B. abortus* may become established inside the cells of these bison before the immune system can be stimulated to produce antibodies. This situation could occur in bison that are infected before, during, or shortly after they are born. These bison remain seronegative and culture negative until the organism is stimulated late in the first pregnancy after infection or by some other aspect of sexual maturity.

It is almost certain that even repeated cultures from live bison or the most extensive specimen collection and culturing from necropsied bison will produce negative cultures from some seronegative and seropositive, infected animals. Unfortunately, current technology and methodology are not able to identify those bison that are infected yet test negative serologically or on culture. Therefore, estimates of percent infection (12%) in the Yellowstone bison herd

are minimum estimates and the actual rate may be higher. The difficulty, and in many cases impossibility, in discriminating infected from uninfected bison is also the basis for slaughtering many of the bison exiting Yellowstone National Park. Accordingly, the proposal includes the slaughter of all seropositive bison exiting in the West Yellowstone area.

BISON MANAGEMENT AREAS

Many of the state agencies were concerned that the EA did not address bison management in certain areas. The Governor of Wyoming, the Wyoming Department of Agriculture, Wyoming Livestock Board, and Wyoming Game and Fish Department were concerned that Alternative 1 needed to address and develop protocol for bison migration out the east gate. The State of Idaho was concerned that Alternative 1 allowed brucellosis-infected bison to roam freely in the Eagle Creek/Bear Creek and Lee Metcalf/Cabin Creek Areas. The Gardiner Ranger District commented that bison leave the park at Cooke City and, although the numbers might not be significant, this could change if Highway 212 is plowed in response to the New World Mine.

The Wyoming Attorney General was concerned that

"the EA seems to give private landowners a veto power over bison management by requiring landowner permission to haze or shoot bison on private land."

He stated the Wyoming State Veterinarian has authority to enter private land, without permission, to control contagious or infectious diseases and he was concerned animal rights groups could purchase private lands and use them as refuges if the EA requires landowner permission.

The State of Idaho wrote

"Allowing brucellosis infected bison to expand into these areas is nothing more than a de-facto expansion of the boundaries of YNP."

RESPONSE: The scope of this EA addresses management of bison that migrate, primarily during the winter, from Yellowstone National Park into areas of Montana north and west of the Park boundary. This EA does not address the few bison migrating through the east gate area of the Park into Wyoming. This plan does not propose expanding the boundaries of Yellowstone National Park.

This plan does not require capture and slaughter of bison migrating into the Eagle Creek/Bear Creek area, Hellroaring Creek area, Slough Creek area, or the Lee Metcalf Wilderness and Cabin Creek Wildlife and Recreation area (Figure 1). Only monitoring of bison is proposed in these areas. Many of

these public lands are remote wilderness areas and none of these public lands have cattle grazing during any time of the year. Domestic cattle will not be able to associate with bison in these areas and the risk of brucellosis infecting cattle in these areas is zero.

The Department of Livestock (DOL) has the authority to enter, quarantine, test, or slaughter any animal on any premise for livestock disease control purposes (Appendix I). When bison are found on private property, DOL will obtain permission from the land owner to remove the bison either by shooting or by hazing. In the event it becomes necessary to remove the bison and the owner refuses to give permission, the department must follow due process by the use of a search warrant in order to effect the removal of such bison. Bison will be allowed to occupy public property as outlined in the Environmental Assessment. The State Veterinarian and the Board of Livestock will determine which bison will be removed from private property.

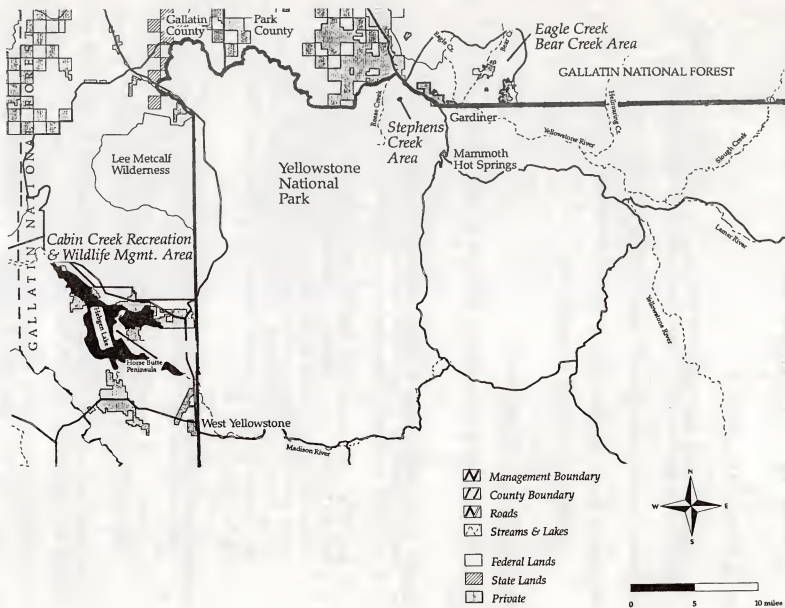


Figure 1. Revised map of the project area.

SUMMARY OF NON-GOVERNMENTAL ORGANIZATION COMMENTS

COMMENTS ON ALTERNATIVES

Of the 19 non-government organizations that responded, only the Montana Stockgrowers Association and the Wyoming Stock Growers Association supported Alternative 1.

"This Interim Plan represents a solid and workable solution to this problem, however temporary..."

Most other non-government organizations could not support either alternative.

"...we strongly believe this EA is fundamentally flawed."

NEW SUGGESTED ALTERNATIVES

Many organizations suggested alternatives in addition to the two examined in detail in the EA.

Suggested Alternative #1 — Promote Recreational Hunting Of Bison

"We also suggest that the reduction of the herd can be accomplished through hunting. One alternative worth considering is to allow public hunting on public lands at Eagle Creek and West Yellowstone."

RESPONSE: This bison herd is classified under the Montana statutes as a herd that is infected with a dangerous disease and is a species requiring disease control. The agencies recognize public hunting as a legitimate recreation activity and one acceptable means to accomplish population control. Public hunting is not an acceptable method to accomplish disease control. The EIS will consider the option of including public hunting within the context of a broader disease control plan.

Suggested Alternative #2 — Vaccinate For Brucellosis

"...why don't the cattle ranchers inoculate their herds against this supposed horrible disease?"

RESPONSE: See response on page 3, NEW SUGGESTED ALTERNATIVES, Alternative Suggestion #1-Vaccinate For Brucellosis.

Suggested Alternative #3 - Restoration/Relocation Of Bison To Other Public/Private Lands, Including Live Capture And Relocation To Indian Tribes

RESPONSE: See response on page 4, NEW SUGGESTED ALTERNATIVES, Alternative Suggestion #2-Restoration/Relocation Of Bison To Native American Herds Or Private Herds.

Suggested Alternative #4 — Establish Bison-Management Areas/Change Public Grazing Allotments

"cattle can be moved rather than the bison; one alternative would be to consider options for moving this [sic] public lands allotment...Another alternative is to remove only sero-positive females from private lands when cattle are present;

RESPONSE: Livestock grazing on public rangelands is an established land use and authorized by federal statute. The grazing allotments in the West Yellowstone area are consistent with current management direction, as defined by the Gallatin Forest Plan. Modifications to current land use plans is beyond the scope of the 1995 Interim Bison Management Plan Environmental Assessment.

Suggested Alternative #5 — Restrict Snowmobile Use In Yellowstone National Park

"One alternative that deserves consideration is to test the influence of groomed roads on bison population dynamics, which could be combined with other alternatives."

RESPONSE: The suggested alternative of restricting snowmobile use in Yellowstone National Park is beyond the intent and scope of this interim bison management plan. This alternative will be addressed in the long term bison management plan and draft EIS to be issued in November 1996. Winter visitor-use management is currently being addressed separately by the Greater Yellowstone Coordinating Committee (GYCC). The GYCC has commissioned an interagency team to evaluate winter use on national parks and forests. Those recommendations will include discussion of winter use and effects on wildlife.

Suggested Alternative #6 - Focus Attention On Completing The EIS.

Many Organizations Commented This Issue Needs More In-Depth Analysis Than An EA Can Provide.

RESPONSE: All relevant issues and alternatives regarding the long term management of bison migrating from Yellowstone National Park to Montana will be fully addressed and analyzed in detail. The draft EIS is expected to be released in November 1996.

RESPONSES TO MAJOR ISSUES OF CONCERN

LIVESTOCK AND PROPERTY PROTECTION AND HUMAN SAFETY

Many organizations stated the EA does not contain adequate documentation of livestock and property damage or human health risks. The Montana Stockgrowers and the Wyoming Stock Growers Associations stated that Alternative 1 would preserve Montana's Brucellosis Class-

Free Status, thereby protecting private property. Many organizations commented that private landowners adjacent to Yellowstone National Park have a responsibility to consider existing historic uses of national park land. Some organizations commented that the presentation on undulant fever neglects to discuss the incidence of cases in the Greater Yellowstone area and thus does not show if the disease is significant in bison from the standpoint of potential spread to humans.

"Documentation of property damage and human health risks are not in the draft EA....No statistical analysis or historical damage or estimates for future damages are provided. "

"The EA ... refers generally to concerns over the disease brucellosis, and property and safety concerns but provides no information about complaints and actual damage."

"Protection of the class-free status for states that adjoin the park is of utmost concern..."

"There is some responsibility here with private landowners to consider the existing, historic uses of adjacent public lands, similar to the way landowners expect consideration of existing ranching operations when a new subdivision is developed on adjacent land."

RESPONSE: Late elk hunts for pregnant female elk pose a greater risk to humans for exposure to the brucella organism. Two cases of undulant fever in humans (one in 1986 and one in 1995), are believed to come from late season elk hunts (Appendix II).

The objectives of the Interim Bison Management Plan include reduction in the risk of damage to private property. The Department of Fish, Wildlife and Parks is responsible for the management of bison that may threaten persons or property (87-1-216, M.C.A.).

Bison complaints and incidents are received, managed, and recorded in cooperative efforts between Montana Fish, Wildlife and Parks, Montana Department of Livestock, the local police department, the Highway Patrol, the county sheriff, and the National Park Service. These complaints primarily involve road nuisance, personal safety, or threats to livestock. Most (over 90%) are recorded in the West Yellowstone - Highway 191 area. A report is filed from a phone call or in-person contact but can involve the same group or individual bison in many incidents causing many different problems. One animal may be involved as a road nuisance, cause fence damage, and be a threat to livestock and humans. It is, therefore, difficult to statistically determine the trend of nuisance bison except to look at the actual number of recorded incidents and road killed bison (Table 2).

Table 2. Number and type of bison nuisance incidents in the State of Montana 1991-1995 from Montana Department of Fish, Wildlife and Parks records.

	1991	1992	1993	1994	1995
Reported Bison Incidents	90	47	6	52	21
Bison Involved in Total Incidents*	435	124	21	--	--
INCIDENTS					
Road nuisance	23	12	2	17	10
Road kill	5	2	2	3	3
Fence damage	12	6	0	4	0
Landscape damage	2	2	1	5	1
Property damage	1	1	1	0	1
Personal safety	19	5	2	19	3
Threat to livestock	24	9	0	4	3
Vehicle damage	7	5	2	3	0
On property	17	10	0	1	0
Injured bison on road	4	5	1	4	2

* may involve the same bison more than one time

TRANSMISSION OF BRUCELLOSIS

A number of organizations stated there was no credible scientific evidence that wild bison transmit brucellosis to domestic livestock on the open range. Thus they were concerned that the threat of brucellosis transmission from bison to cattle did not justify the Proposed Action (Alternative 1). Many organizations questioned removing all bison in the Reese Creek area. A number of organizations pointed out that it is widely acknowledged that elk also carry brucellosis and pose a risk of transmission to domestic livestock, yet there was no mention of this in the EA.

"...there has never been a single documented case of free-ranging bison transmitting brucellosis to cattle...Further, the draft EA is deficient in discussion or consideration of behavioral inter-specific barriers to transmission."

"A primary issue in this debate is one of risk, and whether all bison present an unacceptable risk outside Yellowstone. We maintain that all bison are not an unacceptable risk, and it appears that APHIS and the state have acknowledged this fact as well."

"There is also no discussion of the existence of the disease in elk and why extraordinary attention is being paid to diseased bison but not to elk at this time."

"...there seems little justification from the standpoint of disease concerns to remove all bulls from even private lands."

"...what is the justification for this total, all season removal? Is this anticipated as a temporary activity?"

RESPONSE: Risk factors associated with elk transmitting brucellosis to cattle differ from the risks posed by bison. Using standard serological brucellosis tests, the positive rate for brucellosis for northern elk herds migrating into Montana is about 1 to 1.5 percent. This rate has been tolerated by the state of Montana, other states, and APHIS near the cattle population for 30 to 40 years. Elk are not fed on feed grounds in Montana, have different feed requirements than cattle, are solitary calving animals, usually eat afterbirth, have an infection rate that declines away from the park, and cannot interbreed with cattle. The risk posed by elk is not zero but is considerably less than that posed by bison. Using standard serologic tests, approximately 50% of bison test positive for antibodies to *Brucella abortus*. Data from 1991-92 indicated at least 12% of the bison may harbor the organism. Bison can interbreed with cattle, have feed requirements similar to cattle, calve in groups and movement out of the park by bulls may bring male and female companions with them.

Other states have indicated they will impose sanctions against Montana if bison bulls from an infected herd are permitted to roam freely within the state unless they are first tested for brucellosis. Negative tested bulls will be allowed to occupy public lands outside the park in West Yellowstone during the times of the year when cattle are not present. When cattle are present, bison bulls can interbreed with cattle. While the risk is small for transmission, if it does occur, the consequences are large because brucellosis may become established within the cattle herd and that cattle herd in Montana would need to be slaughtered. Due to the latency of this disease, many other cattle herds could become infected from infected cattle that are sold and placed in other herds. Also see response on page 5, TRANSMISSION OF BRUCELLOSIS, and response on pages 29 and 30, BISON RESOURCE PROTECTION, Bison Biology and Ecology.

X ERADICATION OF BRUCELLOSIS

Two organizations stated that the ultimate long-term goal of any bison management plan ought to be to eradicate brucellosis in the Greater Yellowstone Area.

"This Bison Management Plan represents an excellent first step in eradicating brucellosis in the Yellowstone Bison [sic] herd, which should be the ultimate goal of this entire process."

BISON RESOURCE PROTECTION

Concerns about bison resource protection fell under four sub-categories: bison biology and ecology, carrying capacity, animal welfare, and bison management strategies.

Bison Biology And Ecology

A number of organizations questioned the proposal under Alternative 1 to kill all bison rather than just the positive, pregnant females. Some respondents felt that the action was inconsistent from north to west with regard to males versus females. Many organizations were concerned that removal of sero-positive bison would result in a bison herd with diminished natural resistance to brucellosis. Two organizations were concerned Alternative 1 would select against animals that demonstrate any natural migratory behavior particularly in light of historic travel corridors that were used by wildlife.

"Yet the proposed alternative calls for killing all bison that wander from the park in the Reese Creek area, even those that pose no threat of brucellosis transmission."

"...the draft EA also fails to give estimates of the number of bison that might be affected by Alternative 1....many bison who test sero-positive but show no symptoms of the disease might carry genes that give them resistance to the disease."

"The EA should document the rationale for eliminating various categories of bison on public lands, including sero-positive bulls, calves, and cows; and sero-negative pregnant females. What is the effect of removing bison that have developed antibodies and may be resistant to *Brucella abortus* and may be able to build resistance within the herds?"

- ✱ **RESPONSE:** When cattle are present in the same area with bison from a brucellosis affected herd, APHIS considers all bison a transmission risk, even those bison that test negative. APHIS considers card negative, pregnant bison a risk to cattle, despite their card negative status and despite the absence of cattle from the area. This risk occurs because a female bovine or bison can be infected with brucellosis but test negative until shortly before, during, or shortly after abortion or birth of a live calf. At that time, the infection becomes acute and the animal sheds infective bacteria with the fetus, calf, and/or birth membranes and fluids. Thus a pregnant, infected bison testing card negative could later abort and introduce contaminated tissues into the environment. Published research results reported that *Brucella* organisms can survive for months under favorable environmental conditions, including low temperatures and in biologic tissues.

The frequency of male and nonpregnant, female bison testing negative while infected has not been quantified, and the potential for such bison to shed the organism is not fully understood. Likewise, the ability of infected bulls to shed *Brucella abortus* into the environment is not fully understood. In addition, the ability of infected bison (or bovine) bulls to transmit brucellosis during service has neither been proved nor disproved, so, until reliable data

are collected, the question of transmission by bulls during breeding will remain unanswered. Even if the risk of transmission by these classes of bison from an affected herd to cattle is low, the potential consequences to the cattle industry are great. Accordingly, it is safest to prevent contact between cattle and any bison from a brucellosis affected herd.

Management of bison exiting the park differs between the West Yellowstone, Montana, area and the Gardiner, Montana, area. Under the conditions near West Yellowstone, card negative male bison and card negative, nonpregnant female bison are not considered to be a threat to cattle when the cattle are not present. These classes of card negative bison will be allowed to range freely in the West Yellowstone area during winter from November 1 through April 30. Near Gardiner, Montana, cattle are on the Royal Teton Ranch year-round, and no bison will be allowed to enter the ranch property. However, bison will be allowed on specific public lands north of Yellowstone National Park (the Eagle Creek/Bear Creek area) where cattle are absent year-round.

Under experimental conditions, naturally-resistant cattle and captive bison were card positive for about two to three weeks beginning several weeks after exposure to field strain *Brucella abortus*. It is possible that some naturally resistant bison will be removed in the West Yellowstone area if they are card tested during a similar time window after exposure.

Also see response on page 5, TRANSMISSION OF BRUCELLOSIS.

Carrying Capacity

A few respondents stated that bison numbers ought to be controlled within Yellowstone National Park. Many respondents stated that the goal of Yellowstone National Park ought to be to continue managing a wild, free-ranging herd of bison. Still others were concerned that, since the Proposed Alternative did not limit the number of bison that could be killed, Yellowstone National Park might not maintain a minimum viable bison herd.

"Effective control of bison numbers within the park will facilitate improved forage and habitat conditions, and possibly result in less bison leaving the park in winter months in search of better forage."

"Our objective is to maintain a self-sustaining herd of wild, free-ranging bison centered within the parks...The EA lacks sufficient detail regarding the current migrations of Yellowstone bison. How likely are bison to frequent, for example, the Hell Roaring, Slough Creek, and Lee Metcalf/Cabin Creek areas?"

"...the Draft EA does not establish any threshold population levels that must be maintained to ensure the long term viability of the park's bison herd."

RESPONSE: The issue of the minimum herd size that would be required to assure long term viability of the bison population is beyond the scope of this

EA. The long term management of the bison population, including the issue of viability, requires detailed analysis and will be addressed in the draft EIS. The proposed management actions described in this EA are for interim management of bison that move from Yellowstone into Montana.

The proposed management actions are not anticipated to significantly affect the bison population (see Impacts on Yellowstone Bison Population, page 21 of EA). From the 1984-85 winter to present, bison management removals have varied widely between years and have varied independent of early winter bison population counts (see Table 1, page 15). Management removals apparently have had no long term consequences on this bison herd. While the primary purpose for the proposed management actions is to maintain Montana's brucellosis class-free status and satisfy some provisions in the settlement agreement, the Interim Bison Management Operating Procedures also are intended to permit the bison herd within the park to fluctuate, to the maximum extent possible, in response to natural ecological processes. While population control will occur as a consequence of the disease management actions that take place in Stephens Creek boundary area and in the West Yellowstone area, the proposed action will not compromise the integrity of the herd.

The proposed management action in the new interim operating procedures emphasizes capturing and shipping bison to slaughter instead of shooting all bison, but the agencies do not expect management removals to exceed the magnitude experienced during previous management. Moreover, the revised interim procedures allow bison to use cattle-free public lands in Montana (Eagle Creek/Bear Creek area, Hellroaring Creek and Slough Creek drainages, Lee Metcalf/Cabin Creek area) and allow lower risk bison (i.e. test-negative males and test-negative, non-pregnant females) to use public lands in the West Yellowstone area from November 1 through April 30. It should also be noted that all management removals will occur at the boundary or outside of Yellowstone National Park. Only emigrant animals will be removed and the removal of emigrants should not compromise the integrity of the herd in the park. Given these factors, it is unlikely the effects to the bison population would be beyond those experienced during the last 12 years.

Bison are unlikely to inhabit the upper drainages in the Slough Creek and Hellroaring Creek areas north of the park in Montana. Few bison are also expected to inhabit the Cabin Creek area west of Yellowstone National Park in Montana.

Animal Welfare - Humane Treatment Of Bison

Many organizations stated that if bison were to be slaughtered it would be more humane to shoot them in the field than capture and transport them to a slaughterhouse.

"Removing bison from national park lands and trucking them to slaughter is not the most humane method to remove bison."

"Clearly, the current EA ruthlessly ignores the welfare of the bison in a way ensuring genocide against them."

"I know that bison have been maimed and even killed by one another in transport to slaughterhouses."

RESPONSE: See response on page 8, BISON RESOURCE PROTECTION.

Bison Management Procedures/Strategies

Many organizations commented that bison should have priority over cattle on the public land adjacent to Yellowstone National Park. Some organizations were concerned that bison could be removed from private lands over the objections of the landowners.

"...cattle take priority, even on public lands, and even at great cost, for the benefit of 182 head of cattle grazing from June 1 to October 15. This suggests the intent is to eliminate the risk of brucellosis transmission through bison slaughter rather than to control the risk."

"Does this mean that on private lands from May 1 to October 31, the agencies may remove bison by any method over landowner objections? ...How do the agencies decide which landowners they listen to and which they ignore?"

RESPONSE: See response on page 25, Suggested Alternative #4 -- Establish Bison Management Areas/Change Public Grazing Allotments and response on page 21, BISON MANAGEMENT AREAS.

RESOURCE MANAGEMENT/OTHER RESOURCE PROTECTION

Many organizations were concerned about the impact of the Proposed Action on vegetation, other wildlife, and cultural resources. The Greater Yellowstone Coalition was concerned about the integration of the Proposed Action with the park's potential plans to control noxious weeds on the boundary addition. They were also concerned whether the Madison River sedge bottoms could be avoided in the capture and trapping process. Several organizations stated that they were especially concerned that removal of bison from the ecosystem would affect predators and scavengers including grizzly bears and wolves. Several organizations stated that other species, especially elk and pronghorn, would be stressed and even captured if the Proposed Action was implemented. Additionally, they were concerned about the effect the introduction of the vaccine RB51 on other wildlife in the ecosystem.

Most organizations were concerned that a new wildlife management precedent was being set.

"If bison held in corrals are fed hay, non-native plants (not just weeds) this needs to be addressed in the EA."

"Bison conservation is particularly important in light of emerging evidence of the bison's critical ecological role in maintaining prairie ecosystems and its economic potential as a low-impact ranch animal in the plains and Rocky Mountain states."

"The impact on declining, threatened, and endangered species, particularly wolves and grizzly bears, was not adequately analyzed."

"The discussion of potential impacts to other wildlife from the capture facilities provides insufficient information to evaluate this alternative. ...What ungulates are likely to be affected? We have concerns in particular about low pronghorn populations in the Reese Creek area[...]"

"There was significant discussion at the last couple GYIBC meetings about the potential problems associated with use of [RB51] which may be pathogenic to other wildlife. We ask that before RB51 is used on bison that an amended EA be developed so that the public have full opportunity to comment on the introduction of this organism into Greater Yellowstone."

"We are concerned about the potential precedent of so broadly preventing wildlife from a national park from migrating to lands outside the park."

"...the Draft EA proposed alternative will establish an important precedent governing wildlife management in a national park setting."

"All cultural impacts were not considered."

RESPONSE: Responding to the concern of weeds being in hay fed to bison in capture facilities, only certified weed-free hay will be used in baiting and capture operations. All certified weed-free hay used for baiting purposes will be removed after completion of a capture operation.

On page 9 of the EA, site criteria were established for constructing capture and handling facilities in or outside Park boundaries. Placement of facilities would avoid any known significant or sensitive cultural resources, significant wetland and riparian areas, and areas having rare or sensitive plant species. Threatened or endangered species are not expected to be adversely affected (see response on page 11, RESOURCE MANAGEMENT/OTHER RESOURCE PROTECTION).

Above ground vegetation may be trampled or incur mechanical damage in or immediately near the capture facilities but significant damage is not predicted (see analysis of Impacts on Vegetation, pages 23 and 24 in the draft EA).

Other ungulates such as pronghorn or elk may be stressed from capture operations or unintentionally captured in the facilities. Those individuals captured would be separated from bison and released as soon as practical. Stress may affect individual animals but the proposed capture operations are not predicted to significantly impact the elk, mule deer, or pronghorn populations inhabiting the West Yellowstone or Reese Creek areas (see analysis of Impacts on Other Wildlife, pages 22 and 23 in the draft EA).

The EA (page 11) states, "Pending completion of studies on its safety and effectiveness, RB51 may [be] used on bison in the future." Safety studies would include sampling to test for shedding of the organism into the environment from inoculated animals. RB51 would only be used on free ranging bison in the greater Yellowstone area, if the dose and inoculation route did not cause shedding of live RB51 organisms into the environment. Use of RB51 will be evaluated in accordance with MEPA and NEPA before the vaccine is used on Yellowstone bison.

The Interim Bison Management Plan does not establish a precedent for the management of other species (including elk) that migrate between Yellowstone National Park and Montana. In fact Montana and the NPS frequently share information and cooperate in management of several species of wildlife (elk, deer, grizzly bears) and fish (grayling) that move between the two jurisdictions.

NEPA

Many organizations commented that the EA failed to provide an adequate range of alternatives including a substantive alternative for no action. Many organizations also commented that the EA was significantly lacking in necessary documentation, especially that the PURPOSE and NEED section was not sufficient to show justification for the proposed action. Several organizations stated the EA showed no scientific basis to justify the proposed action. Some organizations commented that the agencies did not intend to modify the proposed interim plan in response to substantive comments by the public.

"The Draft EA fails to analyze or consider obvious alternatives that will more effectively and efficiently accomplish the goal of minimizing the risk of transmission of brucellosis from bison to domestic livestock."

"The agencies, however have not provided sufficient detail in this EA for the public to adequately question and analyze the choice offer. We found this EA significantly lacking in necessary documentation, without an appropriate and reasonable range of alternatives."

"Second, the proposed action cannot be scientifically justified and it is internally inconsistent, thus constituting an arbitrary and capricious policy decision."

RESPONSE: The scope of the 1995 Interim Bison Management Plan Draft Environmental Assessment is constrained by the sequence of several events that preceded its development. In 1989, the agencies agreed to develop a long-term bison management plan and EIS. At that time, the agencies also agreed that an Interim Bison Management Plan was necessary, pending completion of the EIS. The Notice of Intent to prepare that EIS was published in the Federal Register on May 1, 1990. In January 1995, Montana filed suit against the federal government regarding the management of bison. The

proposed 1995 Interim Bison Management Plan is one element of the corresponding settlement agreement. That agreement also includes a provision for the completion of the long-term management plan and EIS by May 1, 1997 and record of decision by July 1, 1997. The EIS will evaluate a full range of alternatives for the management of bison that migrate between Yellowstone National Park and Montana.

FINANCIAL IMPACTS

Many respondents were concerned that the EA did not estimate the cost of the proposed action or the financial impact to local economies or to the agencies involved. Two organizations were concerned about the impact loss of brucellosis-free status could have on the economy.

"Nowhere is there an estimate of the costs of the various alternatives."

"Reductions in the bison herd could therefore have an impact in local economies. This potential impact is not discussed in the draft EA."

"We are very concerned with the economic effects the loss of our APHIS "brucellosis free status" may have on our membership, and the Montana livestock industry in general."

RESPONSE: Federal and state agencies will contribute to the costs of bison management under the interim procedures. APHIS will supply a capture facility for use at West Yellowstone. APHIS purchased this facility in 1991 for capturing bison near West Yellowstone. APHIS attempted to use the facility to capture bison to study the effect and transmission of brucellosis in Yellowstone bison. This study was not done due to a lawsuit filed by the Fund for Animals and an injunction issued by U.S. District Court. Since that time, APHIS has used the facility at numerous places throughout the United States for bison research. APHIS will have no further capital outlay for equipment. One individual from APHIS and one individual from the National Biological Service will be present for tissue sampling, blood testing, and identification when bison are captured or shot.

The National Park Service will supply one capture facility for use in capturing all bison in the Stephens Creek area to prevent those bison in that area from moving onto adjacent private land. During capture operations at Stephens Creek, several NPS personnel would be involved in capturing and handling bison. NPS personnel may also be involved in capture operations in the West Yellowstone area. NPS personnel would continue monitoring bison at or near the north and west boundaries of the park. When appropriate, NPS personnel would also continue hazing bison farther into the park or a capture facility, if bison were near or outside the park boundary.

Following are the estimated costs for the capture facilities and anticipated personnel costs for capture and shooting operations.

APHIS and National Biological Service expenditures:

Testing and Sampling expenses -	\$10,000
Capture equipment expenditures -	\$0
Personnel expenditures -	\$10,000

Department of Livestock will purchase a capture facility for use at West Yellowstone.

Capture equipment expenditures -	\$ 50,000
Personnel expenditures -	\$100,000

Department of Fish, Wildlife and Parks

Capture equipment expenditures -	\$0
Personnel expenditures -	\$25,000

Yellowstone National Park will provide a capture facility in the Stephens Creek area near Gardiner, Montana.

Capture equipment expenditures -	\$ 80,000
Personnel expenditures -	\$100,000

Because this interim plan is not expected to significantly reduce the bison population, measurable impacts to local economies are not predicted due to bison removals. This interim plan also protects Montana's brucellosis class-free status and, thus, negative economic impacts are not predicted for the Montana livestock industry.

PUBLIC ENJOYMENT AND EXPECTATIONS/PERSONAL VALUE

Many respondents were concerned that the EA did not recognize the value that the public places on bison.

"The paragraphs on visitor use and socio-economics make no mention of the value placed by visitors on the opportunity to see wildlife in Yellowstone, including bison. Yet the desire to maintain free-ranging wildlife herds for public viewing is a strong influence on the choice of alternatives, and studies have shown that wildlife viewing is a top reason why visitors come to Yellowstone."

"...tourists who come to Montana or to Yellowstone's wilderness do so in part to see these animals as part of the 'environment' that the EA is officially protecting."

FAVOR OR PREFERENCE GIVEN BY GOVERNMENT TO SPECIAL INTEREST GROUPS

Many organizations were concerned that the EA gives preference to the livestock industry.

"...bison are being broadly treated as a nuisance requiring what may be unprecedented National Park Service action to protect a private industry."

"The Draft EA is unduly and inappropriately burdensome on NPS and ignores stewardship responsibilities of ranchers....It is evident that Park policy and management is being driven by agricultural agencies' interest."

RESPONSE: The EA recognizes both the affects of bison migration on the livestock industry and the consequences of the proposed actions on tourism and other activities associated with the park and surrounding lands. No special preference was given to any special interest group during preparation of the Environmental Assessment. The proposed action attempts to reconcile the conflicts among diverse objectives for an interim period until long-term solutions can be identified and evaluated.

NEED FOR RESEARCH AND MONITORING

Two organizations commented that research should be on-going to find a brucellosis vaccine effective for bison. Several organizations questioned a reference on page 4 of the draft EA that mentioned transferring live bison for research purposes. They felt that this statement was not clarified in the plan.

"Continued work to find and make use of an effective brucellosis vaccine for Bison is another essential factor in solving this problem."

RESPONSE: The NPS is currently involved in an extensive effort to answer questions involving bison ecology, brucellosis, and potential vaccines. The NPS is continuing and expanding research to collect data on various aspects of bison ecology and how *Brucella abortus* survives and functions in a wild environment. These projects involve Grand Teton and Yellowstone National Parks and other cooperators, and the information gathered from this research will aid managers in making sound decisions for the future management of bison and elk in the two parks and the GYA. The research falls under 4 major areas:

1. Epidemiology and pathogenesis of brucellosis in wild bison
2. Development and testing of new brucellosis vaccines for use in wildlife.

3. Risk assessment of brucellosis transmission in a wildland setting.
4. Ecology and carrying capacity of bison in Grand Teton and Yellowstone National Parks.

Some of this research, particularly development and testing of vaccines, may use live Yellowstone bison.

The Agricultural Research Services National Animal Disease Center (NADC) in Ames, Iowa, has completed one safety study of RB51 in bison calves and is conducting a second study. In the first study, RB51 induced an immune response in the bison calves as measured by antibody levels in the blood. The study also showed that RB51 persisted at least twice as long in the bison calves as it did in age-matched cattle given similar doses, but the actual duration of RB51 persistence in bison calves is still unknown. The second study was designed to better define how long RB51 persists in bison calves. NADC is also conducting an efficacy study by administering virulent *Brucella abortus* to pregnant bison that were vaccinated with RB51 as calves.

A safety study of RB51 in captive, pregnant bison was conducted in Montana by NADC and APHIS. The dose (10^9 CFU) and inoculation route (subcutaneously) were the same as those proven to be safe in pregnant, domestic cattle. Two bison aborted, suggesting that pregnant bison are more sensitive than cattle to RB51 at that dose and inoculation route. The researchers concluded that future studies of RB51 in pregnant bison should focus on reduced RB51 doses, repeated if necessary, and on other inoculation routes, particularly the oral route. Additional safety and efficacy studies of RB51 in bison are in the planning stages.

DISTRIBUTION OF LIVE BISON

One organization was concerned that live bison to Indian tribes was not discussed.

RESPONSE: See response on page 4, NEW SUGGESTED ALTERNATIVES, Alternative Suggestion #2-Restoration/Relocation Of Bison To Native American Herds Or Private Herds.

DISTRIBUTION OF BISON CARCASSES

Many respondents opposed the sale of bison meat by the Montana Department of Livestock. One respondent stated that bison carcasses should be auctioned to buy winter range.

"I am opposed to the sale of bison meat by the DOL. Bison are public property; they are not the property of the DOL."

RESPONSE: See response on page 14, DISTRIBUTION OF BISON CARCASSES.

CONSULTATION AND COORDINATION

Many organizations expressed concern that the NPS has changed its role as a cooperator. Several respondents felt that Native Americans should have been included as cooperators. One respondent stated that the agencies need to continue to work together.

"It should be noted that the NPS' previous involvement in cooperative management efforts were predicated on a direct and significant problem. This EA represents a significant shift in their cooperator status and should be noted."

"...it is imperative that the agencies work jointly to address the bison situation."

"Additionally, neither alternative enumerates or considers the interests and desires of the Native American community who have a very real and historic interest in all bison issues."

RESPONSE: See response on page 42, POLICY AND LEGAL ISSUES and response on page 11, NEPA.

Also see response on page 16, CONSULTATION AND COORDINATION.

CORRECTIONS (ERRATA)

Several organizations noted that the map provided with this EA was inadequate.

RESPONSE: See the updated map of the project area (Figure 1, page 23).

The Greater Yellowstone Coalition would like it noted in the background section 1) that "Bison were still located outside Yellowstone in 1872." 2) in addition, bison were reintroduced to Yellowstone not only as a tourist attraction but because of concerns about the virtual elimination of the tremendous herds of the past and the desire to reestablish permanent public bison herds in the U.S.

They noted the land on the northern part of the park was acquired for winter habitat for wildlife migrating from the park and there should be an explanation of how the boundaries were established.

RESPONSE: Thank you, we agree with these statements regarding the Background Section.

The Greater Yellowstone Coalition stated the EA should explain in detail the method of capture, holding and transport in addition to length of time bison are anticipated to be in capture facilities. Where are the traps likely to be located, how many are there likely to be? They would like to know the capacity of the capture facilities and to know if they are sufficient for mass migrations. How will the facilities be monitored? How far would bison likely be transported? What kind of research is anticipated?

"What evidence that the three incidences mentioned of bison aborting calves in Yellowstone National Park was caused by brucellosis?"

The Upper Missouri Trust was concerned that portable temporary corrals would be ineffective at handling large numbers of bison. They also wanted to know if there will be visual markers on the tested bison, if the bison will be tested each year, if there are bison in the park's interior that never will be tested and how this will relate to the control of brucellosis in the herd?

RESPONSE: For capture operations and testing of bison, see response on page 8, BISON RESOURCE PROTECTION. For research see response on page 37, NEED FOR RESEARCH AND MONITORING.

The three incidences of bison aborting calves in Yellowstone National Park, as mentioned in the EA, were two abortions reported in 1917 and one reported in 1992. The two bison cows whose abortions were reported in 1917 had positive serological tests. On March 26, 1992, a near-term aborted bison fetus was found in the park. *Brucella abortus* biovar 1 was isolated from fetal abomasal contents, lung, and heart blood.

Circumstantial evidence exists of abortions in bison from Yellowstone and Grand Teton National Parks. On March 10, 1995, a five year old female bison was shot inside Yellowstone National Park, near the border between the park and the Royal Teton Ranch. She was in very poor physical condition and had a retained placenta; she was presumed to have aborted recently but no fetus was found. During tissue sampling for culture, metritis was grossly visible. A majority of cultures from tissues, swabs, and fluids yielded *Brucella abortus* biovar 1. In 1989, a two year old bison cow from Grand Teton National Park yielded several isolates of *Brucella abortus* biovar 1. From necropsy, the cow had been diagnosed as having endometritis and as having recently aborted.

The Animal Protection Institute commented there was no definition of hazing and the impact on bison.

RESPONSE: Hazing, i.e. moving animals from one location to another, may be attempted to move bison back into the park from outside the park, to move

bison farther into the park away from the park boundary, to move bison from private lands onto Yellowstone National Park or Gallatin National Forest lands, or to move bison into a capture facility. Agency personnel may haze bison on foot, horseback, vehicle, or aircraft, or use a combination of those methods. Personnel may also use cracker shells or rubber bullets in combination with the above methods.

National Park Service personnel will determine the timing, location, and duration of hazing within Yellowstone National Park. Department of Livestock personnel will be responsible for hazing operations outside park boundaries. The safety of personnel will be the primary consideration in any hazing operation. At no time will the safety of personnel be compromised to accomplish any hazing operation.

BISON MANAGEMENT AREAS

One organization felt that the Proposed Action should address other areas of bison migration adjacent to the park. Many respondents were concerned that domestic livestock received priority over wildlife on public lands and stated that wildlife should have preference over livestock on public land. Several respondents noted that historic migration corridors, such as the Yellowstone River corridor, should be evaluated for the role that they played in bison ecology.

"Is this settlement direction toward total restriction of bison from this [sic] private lands intended as a long-term solution? The EA should provide the legislative basis for this position on bison, and establish the parameters of this position."

"What do you mean when you say the traps may be located 'at or near' the park boundary? Will the traps be placed on private or public lands?"

"Using a site specific management objective is also desirable, as each area can be evaluated and the management objective can be customized for that area."

"We further suggest that the plan be expanded to include bison migrating out of the East end of Yellowstone Park."

RESPONSE: The Interim Bison Management Plan does not designate specific trap locations in the West Yellowstone area because the agencies do not intend to erect permanent capture facilities in this area. Trap sites will be selected in response to movements and distribution of bison. Sites could occur on National Forest lands, on Park Service lands or, with the landowner's permission, on private lands. Selection of trap sites in the West Yellowstone area would follow the criteria listed on page 9 of the EA.

Also see response on page 29, BISON RESOURCE PROTECTION, Bison Biology and Ecology.

Management of bison migrating from Yellowstone into Wyoming is beyond the scope of this plan. This plan only addresses management of bison migrating from Yellowstone National Park into Montana.

POLICY AND LEGAL ISSUES

Many organizations questioned whether the Draft EA met the intent of the National Park Service Organic Act and NEPA. Some respondents were concerned that Alternative 1 could set a legal precedent for national parks assuming responsibility for other park wildlife-related damage. Some organizations stated that the settlement agreement included a provision under which the NPS recognizes the Royal Teton Ranch's right to build and maintain a fence on Royal Teton Ranch property contiguous to the park's northern boundary to exclude bison and the Draft EA should have discussed what federal laws and regulations apply to this action. Several organizations questioned if the proposed action was rightly predicated on the assertion that APHIS rules and regulations apply to wildlife.

"First, the proposed action, which involves the use of Park Service employees and land to capture and slaughter bison, appears to violate the National Park Service Organic Act and cannot be reconciled with Yellowstone's wildlife management policies...Although the proposed alternative may be an attractive way to smooth relations with neighboring landowners, agencies, or governmental entities, it cannot be squared with the Park Service's basic preservationist mission as spelled out in the governing legislation and prevailing wildlife management policies."

"The EA should document the legislation and policy under which the National Park Service has the authority to capture wildlife within a national park simply to prevent wildlife from entering private property, and how and why it applies to this situation....We do not view this situation, for example, is [sic] one involving "surplus" bison, or of needing to destroy animals detrimental to the use of the parks (U.S.C. §3 and §36)."

"The EA, however, contains no mention of [of the federal laws and regulations that apply to this action [the right to build a fence to exclude bison], and how consideration of this 'right' is integrated into the choice of alternatives, including the selected action. In particular, we would like a discussion of the applicability of the Unlawful Exlosures Act."

RESPONSE: Statutes, regulations, and policy guidance direct the management of Yellowstone National Park (YNP). The proposed action is consistent within these authorities.

Law:

Congress established YNP on March 1, 1872, as "a public park or pleasuring ground for the benefit and enjoyment of the people." 16 USC 21. The Secretary of the Interior has exclusive control of the park and may make regulations providing for the preservation of the "natural curiosities, or wonders, within the park, and their retention in their natural condition . . . and provide against the wanton destruction of fish and game found within the park." 16 USC 22.

The "Organic Act" established the National Park Service (NPS) and directed the NPS to "promote and regulate the use of the federal areas known as national parks . . . by such means and measures as conform to the fundamental purpose of the said parks . . . which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." 16 USC 1.

An amendment to the Organic Act provides that the authorization of activities and the protection, management, and administration of areas of the National Park System "shall be conducted in light of the high public value of the National Park System and shall not be in derogation of the values and purposes for which these various areas have been established." 16 USC 1a-1.

Additionally, the Secretary has the discretion to cooperate with states in the enforcement of state laws [16 USC 1a-6] and the discretion to provide for the destruction of animals that may be detrimental to the use of the parks [16 USC 3]. Finally, the NPS must comply with federal laws such as the National Environmental Policy Act, the Endangered Species Act, and other environmental protection and preservation statutes.

Regulation:

Regulations, based on statutory authorities that govern actions in national parks, are in Title 36, Code of Federal Regulations. These regulations give Park Service management broad authority in implementing plans for the protection, conservation, and management of wildlife and other natural resources. Further, the regulations in Parts 2 through 5 and 7 of Title 36 do not "prohibit administrative activities conducted by the NPS, or its agents, in accordance with approved general management and resource management plans, or in emergency operations involving threats to life, property, or park resources" [36 CFR 1.2(d)]. NPS manages bison in YNP in accordance with the park's Statement for Management and under the auspices of these regulations.

Policy:

Within the framework of these laws and regulations park management has broad authority to implement policy through planning efforts such as this EA. All planning actions, however, must be within the mandates provided by the legislation applicable to the particular park unit, within the overall regulatory authority of the agency, and consistent with policy, resource trust responsibility, and resource management objectives.

NPS recognizes the need to consider the regional context of the park in planning, the importance of joint agency planning without respect to ownership of adjoining lands, and the need for planning on an ongoing basis. Since parks may not be complete systems relating to visitor experiences or to park resources, activities on adjacent lands may significantly affect the success of park programs. Park activities also may have effects outside the boundaries of the parks. Pertinent policies guide park involvement in planning in a regional context and working cooperatively to address mutual problems or issues that cross boundaries. NPS units strive to work with adjacent federal, state, local agencies, and adjacent landowners in cooperative planning and management. Because parks are integral parts of larger regional environments (ecosystems), the NPS works cooperatively with others to anticipate, avoid, and resolve potential conflicts, and to protect park resources. NPS also works cooperatively to address mutual interests in the quality of life for community residents, considering economic development as well as resource and environmental protection.

NPS policy directs superintendents to work with neighboring landowners on topics of mutual interest, to be sensitive to influences and impacts of their management of park lands, and to enhance beneficial effects and mitigate adverse effects as possible, consistent with NPS policies and management objectives. Superintendents also should cooperate with others, including neighboring landowners, to improve resource management and increase the likely success of projects. NPS encourages the development of cooperative agreements.

Within national parks, the overall NPS policy on wildlife seeks perpetuation of native animal populations as part of the natural ecosystems of parks, with emphasis on minimizing human impacts on natural animal population dynamics. This includes protecting native animal populations within parks by restricting harvest, removal, destruction, harassment, or harm through human action. NPS policy directs that parks may remove individual animals within a population only when necessary for human safety and health, to protect property or landscaped areas, as part of an NPS research project described in an approved resource management plan, as part of a research project conducted by others who have an appropriate NPS collection permit, or to restore native populations in other parks or cooperating areas without diminishing the viability of the populations from which the animals are taken [NPS Management Policies 4.6].

NPS policy further directs parks to ensure preservation of migratory species populations and their habitat within the park, and wherever possible to cooperate with others to ensure the preservation of migratory populations and their habitats outside the parks. Further, NPS encourages parks to protect the

full range of native genetic types of plant and animal populations in the parks by perpetuating natural evolutionary processes and minimizing human influences. NPS managers must consider the need to maintain appropriate levels of genetic resources.

NPS relies on natural processes, to the greatest extent possible, to control populations of native species. When human activities cause unnatural concentrations of native species in parks, the park may control the native species if the activities causing the concentrations cannot be controlled. NPS also may control animal populations or individuals throughout a park when the animals present a direct threat to visitor safety and health, and in cultural and developed zones when necessary to protect property or landscaped areas. A park must base its decision to initiate a control program on scientifically valid resource information obtained through research. A park's planning and implementation of control actions must comply with established planning procedures, including provisions for public review and comment. Where persistent human/animal conflict problems exist, the park must determine whether or not curtailing or modifying visitor use and other human activities might be a more desirable alternative than exercising control directly against the animals. Further, when evaluating the need for controlling animal populations, the park must document that need, and the results of any actions, by research studies and in the natural resource management plan [NPS Management Policies 4.6].

Parks also may use other management measures, as necessary, including live trapping for transplant elsewhere, gathering of research specimens for NPS and cooperating agencies, public hunting on lands outside the park, habitat management, predator establishment, and destruction by NPS personnel or their authorized agents if it is determined animals must be removed. In controlling wildlife populations, parks must give highest priority to encouraging public hunting outside the parks and live trapping within parks for transplanting elsewhere. The NPS consults, as appropriate, with other federal land-managing agencies, U.S. Fish and Wildlife Service, state agencies, native American authorities, and others regarding programs to control populations of fish and wildlife, research programs involving taking of fish and resident wildlife, and cooperative studies and plans to guide public hunting outside park boundaries. In cases where NPS removes individual animals from park populations, carcasses may be left in natural zones to decompose, or live animals or carcasses may be removed from parks, according to provisions of applicable laws, agreements, and regulations, including giving preference to Native Americans (NPS Management Policies 4.6-4.7).

These wildlife policies are further refined in natural resource management guidelines [Natural Resource Management Guidelines, NPS-77, 1991]. This guidance provides that parks may control diseases in native animal populations under certain conditions, including: (1) the disease is caused by an exotic organism, (2) the disease is likely to be transmitted to livestock, and (3) a plan has been completed and approved by the Regional Director. Further, NPS policy directs parks, when prudent and feasible, to remove or eradicate exotic species whenever such species threaten park resources or public health. The parks should give high priority to exotic species that have a substantial impact on park resources, including exotic species that significantly hamper the management of park or adjacent resources.

NPS policies distinguish between native and exotic pests (defined as any organism interfering with the management purposes of the park), and describe specific situations where pest species may be managed, including to prevent outbreaks of the pest from spreading to animal populations outside the park.

The parks should use integrated pest management (IPM) procedures to determine when and how to control pests. IPM is the coordinated use of pest and environmental information with available pest control methods to prevent unacceptable levels of pest damage by the most economical means and with the least possible hazard to people, property and the environment.

These overall NPS policies and guidance then are interpreted and implemented by individual parks for particular situations within each park. Yellowstone's bison management objective is "to maintain a self sustaining population of free ranging bison in the park while cooperating with other agencies to reduce the potential for human conflicts and brucellosis transmission outside the park" [Statement for Management - Yellowstone National Park, 1991].

The Resources Management Plan (RMP) [Resources Management Plan, Yellowstone National Park, 1995] recognizes the need for management of bison at boundary areas where potential conflicts exist both from a trans-boundary movement and from a disease aspect. The RMP maintains the objective of allowing natural processes to determine population levels. An additional planning objective seeks cooperation with other stakeholders in developing a long range bison management plan while addressing the immediate needs through interim procedures [RMP P 13, YELL-N-034.000]. The RMP also recognized that the long-term bison management program "will likely require the park to undertake more intensive boundary management, which may require substantial funds and staff time, as well as potentially requiring construction of fences and/or other bison management facilities [RMP, p 13]."

The Concern:

Commenters questioned NPS's authority to capture or remove bison within the park to protect resources or private property located immediately adjacent to the park. They also asserted that the proposed action violates NPS policy regarding wildlife management objectives of free ranging populations and has implications for the management of other wildlife populations, besides bison, that move across the boundary in the same vicinity including elk, deer, pronghorn, and other species.

The Proposal:

In cooperation with the State of Montana, NPS proposes to capture all bison that move to the Stephens Creek area and are likely to proceed to adjacent private land. If, however, some bison cannot be captured, NPS will haze them farther back into the park or remove them by shooting. NPS may shoot bison that may be inappropriate for capture, such as large mature bulls, because of the risk of severe injury to people, other bison, or themselves. Bison that evade capture, removal, or hazing and go onto the immediately adjacent private land will be removed, probably by shooting. Native American or social service organizations will salvage all bison carcasses not needed for research. The captured animals will be sorted by age and sex classes prior to transport to minimize risk of injury during shipment and will be transported to an authorized slaughter facility.

For several on-going or potential research projects, all animals will be tested using GYIBC protocols for Brucella seroreaction. A statistically adequate sample of all animals, age and sex classes, and positive and negative seroreactors will be necropsied and cultured to determine presence or absence of Brucella bacteria and will be examined for evidence of reproductive status and disease manifestations according to GYIBC protocols. Other biological data will be collected from all animals. Selected animals may be shipped live to various research facilities when involved in authorized research related to etiology and epidemiology of Brucella or vaccine research and testing.

It is important to determine seroprevalence and infection rates and increase knowledge regarding the epidemiology and pathogenesis of Brucella in bison as called for in the GYIBC MOU. Objectives that will be addressed include:

- (a) Determine relationship between serologic results and culture results; and

- (b) Advance understanding of epidemiology and pathogenesis of Brucella in bison of all age and sex classes and stages of reproductive condition.

The Situation:

Past experience indicates that bison that move onto Stephens Creek flat likely will go beyond the boundary unless they are hazed repeatedly. Repeated

hazing becomes very stressful to the animals and success decreases with repeated attempts. The area immediately adjacent to the boundary at Reese Creek is private land where cattle may be at any time of the year. Some of the bison carry field strain Brucella; the most recent sampling indicates that approximately 50% test positive for Brucella antibodies (they have been exposed to Brucella) and Brucella organisms were isolated from tissues in about 12% of those tested. Whether these animals are likely to shed the Brucella organism in sufficient quantity or frequency and transmit Brucella to domestic livestock is in debate. There is an unquantified risk that an infectious amount of Brucella could be shed by bison, could be ingested by cattle, and infect cattle with Brucella.

Recent changes in Montana law allow the Montana Department of Livestock to take one of two actions when bison from wild populations exposed to Brucella enter Montana: capture and remove to slaughter or shoot and remove. APHIS officials has stated that the presence of exposed wildlife (bison) and the risk of transmission could jeopardize the brucellosis Class-Free status of the State of Montana. Several other states have independently imposed testing requirements on Montana cattle prior to importation. Such actions can interfere with interstate shipment and imposes additional costs on cattle producers.

Under Montana law and procedures, the Montana Department of Livestock may remove or kill all bison that move from the park onto private land. If they are not removed by the Department in an appropriate time frame, Montana law allows the private landowner to kill the animals.

The current proposal would establish temporary capture facilities within the park at Stephens Creek. The location of the facility at the proposed Stephens Creek site is the most desirable from several aspects: it is on public land (although within the park); it is the most feasible site (possibly the only feasible site) on public land; it is the site which will avoid effects on archeological and cultural resources; it is the site which will avoid most effects on wetland, riparian, and native vegetation: it is the site for which road access, electrical supply, and water are available to operate a facility in a safe, effective, and humane manner.

The interim operating procedures proposed to be used in the vicinity of Stephens Creek are specifically directed towards bison from a population that has been exposed to Brucella. Based on experience in past years, bison that reach Stephens Creek are most likely to move beyond the park boundary onto immediately adjacent private land. The interim operating procedures will be used while the agencies develop the long-term management program. It is not directed at other wildlife species or populations. NPS will design, construct,

and operate the facility to avoid conflicts with and impacts to other species that use this area including elk, deer, and pronghorn. This action in Stephens Creek is one part of the overall interim operating procedures that, in their entirety, will allow bison on public land where livestock are not present, will remove bison that test positive for exposure to Brucella in areas where livestock occur seasonally, and will preclude bison from moving onto private land where livestock occur.

RTR Right to build fence and applicability of Unlawful Inclosures Act:

The Royal Teton Ranch, an adjoining land-owner on the park's northern boundary, was a party, as plaintiff-intervenor, to the settlement agreement between the State of Montana and the U.S. Department of the Interior and U.S. Department of Agriculture. The Settlement Agreement at Paragraph 7 states, "NPS and USFS recognize RTR's right, in accordance with applicable federal laws and regulations, to build and maintain a fence on RTR's property contiguous to and in the vicinity of YNP's northern boundary to exclude bison from RTR's property." This paragraph deals with a possible future action by a private party on private land. No proposal for fence construction along the boundary is included in the proposed action. By letter dated April 11, 1996, RTR advised the United States and the State of Montana that it would proceed to construct a fence along the national forest/park boundary line. NPS is reviewing the letter and the fence plans in order to provide comments to RTR. Any decision by NPS regarding the fence on RTR property is not an action subject to NEPA.

One respondent stated

"There is no Part 78 and UM&R 'compliance' that applies to migrating wildlife."

RESPONSE: APHIS contends that under statutes (21 USC 111, 21 USC 114a, PL 87-518), the Secretary of Agriculture has the authority to regulate interstate movement of animals (domestic or wild) if the primary concern relates to livestock health. APHIS is recommending changes to 9 CFR to clarify this authority. The recommended changes will be published in the Federal Register. The National Park Service contends APHIS does not have authority over migrating wildlife and the NPS contends migrating wildlife do not "move interstate".

SUMMARY OF INDIVIDUAL COMMENTS

COMMENTS ON ALTERNATIVE 1. REVISED INTERIM BISON MANAGEMENT OPERATING PROCEDURES (PROPOSED ACTION)

Comments giving full support to Alternative 1 were in the minority. Some said they did not like killing bison but understood why the plan was needed. A few respondents stated that they were in favor of Alternative 1 only if it was an interim plan. Many comments stated unequivocally they did not want bison killed.

General Comments Supporting Alternative 1

"...as much as I deplore your plan of bison slaughter on a planned agenda, I do see the necessity for such a plan."

"I hate the idea of any of these animals being killed and yet I realize that this is unavoidable in some circumstances."

"After studying the document concerning the brucellosis issue, I also support the Proposed Alternative."

"I think your Alternative one is excellent..."

General Comments Criticizing Alternative 1

Commentators criticized Alternative 1 in a variety of areas including the cost of the program to taxpayers; preference given to special interest groups; the precedence it would set for other wildlife management, especially elk; and the killing of bison.

"Your first alternative ...is overkill and would establish a convoluted involved system creating more problems and outrageous expenditure of money, time and effort then is necessary for solving the problem."

"Alternative 1 is an expensive way for the National Park Service to spend our tax dollars to satisfy the livestock industry, without settling the issue of brucellosis, since elk are also brucellosis carriers."

"Your plan is nothing more than a license to kill bison for the benefit of the Montana rancher."

"If I had to pick one I'd say the first one [alternative] seems best. But that is like picking the best of two evils."

Ninety-four form letters opposed Alternative 1 because

"it proposes to kill many bison without sufficient justification. This would set a precedent for similar actions against other wide-ranging wildlife in national parks, especially elk."

RESPONSE: See response on page 33, RESOURCE MANAGEMENT/OTHER RESOURCE PROTECTION.

COMMENTS ON ALTERNATIVE 2 - CONTINUATION OF CURRENT INTERIM BISON MANAGEMENT PLAN

General Comments In Favor Of Alternative 2

Some respondents favored Alternative 2 as a less complex, less costly alternative.

"I support the present system. This system allows the MDL to shoot Bison migrating into Montana."

"...the present simple 'second alternative' is by far the lesser of two evils."

NEITHER ALTERNATIVE

Many respondents preferred neither alternative because they felt killing bison was unacceptable. Some respondents recommended rejecting the proposed draft EA and supporting an EIS instead.

"...I am appalled at your solutions for bison Management Yellowstone Park and surrounding areas. The words 'slaughter and 'kill' run rampant throughout the entire text."

"Please uphold the integrity of Yellowstone National Park and the Greater Yellowstone Ecosystem by rejecting the proposed Draft EA. Instead, support a thorough and rigorous EIS process..."

"Please let the more extensive EIS process serve the goal of getting the best possible bison plan."

"I am writing...in opposition to the National Park Service's interim plan...NPS needs to do a more detailed environmental impact statement."

RESPONSE: See response on page 34, NEPA.

NEW SUGGESTED ALTERNATIVES

Several respondents suggested alternatives to be considered in addition to the two examined in the EA. Related suggestions are grouped together. Although some of these suggestions may only be modifications of Alternatives 1 or 2, they are listed as presented in the comments.

Suggested Alternative #1 — Artificial Birth Control For Bison

"...is there any reason why female bison cannot be sterilized."

"The only humane method...is birth control in buffalo feed..."

"Has immunocontraception been considered, such as is now being used on a trial basis for deer herds?"

RESPONSE: Bison can be sterilized using an expensive surgical procedure. This procedure requires capture, immobilization, and extensive handling of the

animal. This procedure was deemed unfeasible for an interim management plan. The effects and effectiveness of immunocontraception in wild free-ranging bison are not well understood and were not proposed for this interim plan. Research proposals are being developed to investigate the effects of immunocontraception on bison. Both surgical and immunocontraception sterilization techniques will be evaluated in greater detail in the long term management plan and EIS.

Suggested Alternative #2 — Recreational Hunting Of Bison

"Why not sport hunts where citizen hunters would pay to shoot the bison?"

"...is there any way to allow hunters who can qualify with there [sic] shooting ability and willing to pay the fee required to participate to the shooting of necessary Bison?"

RESPONSE: See response on page 24, NEW SUGGESTED ALTERNATIVES, Suggested Alternative #1-Promote Recreational Hunting Of Bison.

Suggested Alternative #3 — Vaccinate For Brucellosis

"However I hope that other important measures will be implemented as well, such as: 1. MANDATORY livestock vaccination for brucellosis (ALL domestic cattle in the area should be vaccinated)..."

"...ranchers could inoculate their cattle..."

"Herds within the area of possible contact should be enrolled in a State controlled vaccination/testing program."

"I would strongly recommend that individual ranchers and States of Wyoming and Montana adopt necessary prophylactic measures."

RESPONSE: See response on page 3, NEW SUGGESTED ALTERNATIVES, Alternative Suggestion #1-Vaccinate For Brucellosis.

Suggested Alternative #4 — Restoration/Relocation Of Bison To Other Public/Private Lands

"I believe that only workable long term solution to the fear of disease transmission in the Yellowstone area is to seize all private lands surrounding Yellowstone Park through eminent domain."

RESPONSE: Thank you for your comments. This Alternative is beyond the scope of the EA. We believe such drastic action is unnecessary and that other feasible solutions exist for managing bison.

"Transplant the bison to other states. N.D. [and] S.D. and other northern states."

"I believe the live bison should be offered for sale for restocking domestic herds,..."

"...the excess should be given to the general public or other Buffalo ranchers who raise them free of charge except for the transportation and capture costs."

"I still would like consideration of the tribes' proposal of live capture and transport to reservations for testing, culling, beginning herds or adding to existing herds."

RESPONSE: See response on page 4, NEW SUGGESTED ALTERNATIVES, Alternative Suggestion #2-Restoration/Relocation Of Bison To Native American Herds Or Private Herds.

"I am in favor of acquiring more land to extend existing boundaries..."

"If the areas permitted for cattle were historically or are presently identified as critical winter range, than attempts should be made to acquire these permitted allotments..."

RESPONSE: See response on page 25, NEW SUGGESTED ALTERNATIVES, Suggested Alternative #4-Establish Bison Management Areas/Change Public Grazing Allotments.

Suggested Alternative #5 — Fence The Border Of Yellowstone Or Private Adjacent Land So Bison Can't Wander Outside Boundary

"It would be more feasible and economically efficient in the long run to build barriers across the migration routes."

"Why not put natural-looking fences to completely surround Yellowstone so that bison won't wander outside of the boundaries..."

"What's wrong with fencing in certain areas to keep the bison from migrating?"

RESPONSE: Fencing all or portions of Yellowstone National Park's boundary was not considered for an interim management plan because the scope of this EA considered the short term management of bison migrating to specific areas. Additionally, fencing designed to exclude or prevent bison migration to certain areas would also impair or prevent other wildlife migration. Along Yellowstone's northern border, elk, mule deer, pronghorn, and bighorn sheep use portions of the habitat in the Stephens Creek area and regularly migrate to public lands outside the Park boundaries.

Suggested Alternative #6 — Supplemental Feeding Of Bison

"You could fly hay into the bison at the park so they would not have to migrate"

RESPONSE: The NPS and State of Montana do not recommend or endorse the policy of feeding bison inside Yellowstone National Park. Bison do not always migrate to areas outside the park because of lack of food. Many times bison simply wander and end up in new places. Sometimes food is available inside the park but weather events (very deep snow, ice layers) make food temporarily unavailable. Bison, like elk, will move down in elevation where environmental conditions are more favorable. Such an area exists on the

northern winter range, including the Stephens Creek and Reese Creek area in Yellowstone and some areas north of Yellowstone.

Feeding would also unnecessarily concentrate bison and could potentially cause severe damage to vegetation and soil in the feeding area. Feeding can also cause significant intraspecific strife among animals where larger more aggressive animals will exclude smaller weaker animals possibly injuring, goring, or trampling them. Unnatural concentrations of animals could foster transmission of disease, including brucellosis, to uninfected animals. Examples of these undesirable effects can be found on game farms and wildlife feedgrounds.

Suggested Alternative #7 — Land-Use Restrictions/Change Public Grazing Allotments

"Keep cattle off winter bison ranges and bison and elk spring calving range"

"Bison should be permitted to graze and roam on Public lands."

"Ranchers can vaccinate their cattle and keep pregnant cows in special pens."

"Let us do away with cattle grazing on public lands."

"...owners of private lands adjacent to the park might be encouraged to limit the grazing of their animals, or switch to animals which are not at risk of brucellosis."

RESPONSE: See response on page 25, NEW SUGGESTED ALTERNATIVES, Suggested Alternative #4-Establish Bison-Management Areas/Change Public Grazing Allotments. Also see response on page 3, NEW SUGGESTED ALTERNATIVES, Alternative Suggestion #1 - Vaccinate For Brucellosis.

Suggested Alternative #8 — Restrict Snowmobile Use In Yellowstone National Park

"Snowmobiles must be prohibited from the park to permit natural regulation to limit bison population size"

RESPONSE: This alternative is beyond the scope of this short term interim management plan designed to manage bison migrating from the Park into Montana. This alternative will be considered in the long term EIS.

Suggested Alternative #9 — Have NPS Supply Herding Animals To Keep Bison Within The Park Boundaries

"Would there be any possibility of the U.S. Government....supplying the ranchers with Llamas or another kind of animal that would keep the bison within the park boundaries?"

RESPONSE: We are not aware of llamas or other animals that could consistently keep bison inside park boundaries. Our experience, using NPS personnel to haze bison back into park boundaries, has shown initial success.

However, as winter progresses and animals tire from being hazed, some animals, particularly bulls, simply will not be moved.

Suggested Alternative #10 - Focus Attention On Completing The EIS.

This issue needs more in-depth analysis than an EA can provide.

"An Environmental Impact Statement should be prepared for such a controversial project involving America's only free-roaming herd of bison, not an EA only."

RESPONSE: See response on page 34, NEPA.

RESPONSES TO MAJOR ISSUES OF CONCERN

LIVESTOCK AND PROPERTY PROTECTION

Only a few comments were received regarding private property damage. Some respondents stated they supported Alternative 1 because they realized the danger of brucellosis to domestic livestock, while others stated there was no danger to domestic livestock from brucellosis. One respondent questioned how many cattle were lost to the "virus". Another respondent commented on the sacrificed time and money spent to satisfy brucellosis standards and guidelines to protect his family and his livestock. Another respondent stated that current private property owners were aware of the potential damage to property at the time of purchase and had a stewardship responsibility to accommodate wildlife and to consider existing, historic uses of adjacent public lands. One respondent felt that potential damage to personal property was referred to in the EA but there was not adequate information about complaints and actual damage to justify management actions towards bison.

"Except for within a brucellosis context, potential for damage to personal property and threat to human safety are not discussed in the Environmental Assessment. If these issues are truly relevant they should have been defined and discussed, otherwise delete them."

RESPONSE: See response on page 26, LIVESTOCK AND PROPERTY PROTECTION AND HUMAN SAFETY.

TRANSMISSION OF BRUCELLOSIS

In general, respondents who were against either alternative questioned whether brucellosis could be transmitted from bison to cattle in the wild. Some stated bull bison should not be killed as they posed no risk for brucellosis transmission. One stated killing bison would not provide a solution to potential infection of domestic livestock because some bison could stray outside the park unnoticed. A number of respondents questioned why bison were being slaughtered when elk and many other species could also carry brucellosis.

"...there has never been a documented case of *Brucella abortus* transmission from bison to cattle under natural conditions..."

RESPONSE: See response on page 5, TRANSMISSION OF BRUCELLOSIS. Also see response on page 29, BISON RESOURCE PROTECTION, Bison Biology And Ecology.

HUMAN SAFETY

Most of the comments received regarding human safety and health were from agencies who support Alternative 1. One comment received from an individual disputed any threat to human safety while another declared the link between brucellosis in cattle and undulant fever in humans had been documented and a reduction of infected cattle herds was imperative.

"I do not buy the contention that bison management is necessary for the protection of human safety"

RESPONSE: See response on page 8, BISON RESOURCE PROTECTION and response on page 7, HUMAN SAFETY.

BISON RESOURCE PROTECTION

A number of respondents focused on the potential impact on bison ecology and biology. Many respondents questioned the impact of slaughtering all pregnant female bison outside the boundary. Some questioned the biological rationale for the proposal to begin killing all bison on May 1 and asked why this date was chosen.

RESPONSE: The Interim Bison Management Plan provides for some bison use on public lands in the West Yellowstone area from November 1 through April 30 because there are no permitted cattle at that time. Permitted cattle use the Horse Butte allotment in the West Yellowstone area from June 15 through September 15 each year. Cattle typically occur on private lands until November 1 or later. The proposal allows only seronegative male and non-pregnant female bison in the area and it is unlikely that those bison will shed brucella organisms during the period they are allowed to use these public lands. Should *B. abortus* be shed in the environment, it is unlikely that the organisms would remain viable for more than the 30-days from May 1 to June 1. The preferred method for removing bison from public lands in the West Yellowstone area after May 1 is to haze or herd them back into the Park.

One respondent commented that the document satisfied the concern that a viable bison population would be protected. In addition, several respondents stated Yellowstone National Park bison carrying capacity was not appropriately addressed and data should be presented that modeled future population trends and habitat requirements.

"The document fails to state the park's bison carrying capacity or desired population level."

"The population should be reduced 4 to 500 and certainly less than 1000 healthy well nourished animals."

"The scope of the EA is based on the findings identified in the lawsuit, however, additional consideration should be placed on determining the habitat requirements of the bison of YNP."

"...the EA should evaluate potential future population trends in each of the bison herds, considering such factors as reduction based on current and proposed management policies, vegetation, increased park visitation, natural climactic conditions, etc."

RESPONSE: Bison carrying capacity for Yellowstone National Park and surrounding public lands outside the park is not quantitatively known. The NPS is currently cooperating with researchers to develop research proposals and methods of determining bison ecological carrying capacity, or more appropriately, if present bison numbers are significantly and irreparably damaging the grassland ecosystems. That research in areas where approximately 2/3 of the bison population live will not be completed for several years. Research conducted on Yellowstone's northern winter range indicated that ungulate grazing did not negatively impact the grazing community, and in some instances, stimulated grassland productivity.

A number of respondents were concerned for animal welfare and felt that removing the bison for slaughter rather than shooting them would be less humane.

"The slaughter of sero-negative pregnant females is appalling. A young herd is a healthy herd. If you must slaughter kill the old and sick."

"Make sure bison are treated in a reasonable humane manner."

"How will the capturing facility impact bison not infected with brucellosis?"

RESPONSE: See response on page 8, BISON RESOURCE PROTECTION.

RESOURCE MANAGEMENT/OTHER RESOURCE PROTECTION

Many respondents were concerned about a potential impact on vegetation; a potential impact on wildlife, including threatened and endangered species; and the impact of livestock grazing on public land. Most respondents who were concerned about a possible effect to threatened and endangered species felt that Alternative 1 satisfied those concerns.

RESPONSE: See response on page 33, RESOURCE MANAGEMENT/OTHER RESOURCE PROTECTION.

Many respondents voiced a concern that this plan sets a precedent for similar actions against other wildlife species.

"Also as a public citizen, I believe that Wildlife Management Areas should be controlled by interests of wildlife only, and not domestic cattle interests."

"The central question raised by this plan, which is not addressed in the environmental assessment is as to the possibility as well as the desirability of separating and manipulating those aspects of natural biological processes which are perceived as adverse to man from those which are perceived of as being harmless or beneficial to man."

"The EA fails to address how Alternative 1 will impact the future management of elk, deer, and other animals carrying brucellosis."

"Capture corrals should be seeded with native grass seed. Captured bison should be fed 'weed seed free' hay."

"I think the Interim plan is a great start toward attaining not only Brucellosis eradication from the park wildlife but also a start toward reasonable management of wildlife populations with out stressing the environment in which they survive."

"The document has ... satisfied ... predators and endangered species would not be adversely affected."

"Since elk also are susceptible to this disease, will we next slaughter elk that leave the Park to survive winters?"

RESPONSE: This plan does not set a precedent for management of other wildlife species. See response on page 33, RESOURCE MANAGEMENT/OTHER RESOURCE PROTECTION.

Alternative 1 did not address impacts of this alternative on managing elk, deer, and other animals carrying brucellosis because that is beyond the scope of this plan. This interim plans deals specifically with management of bison migrating from Yellowstone National Park into Montana. (see Introduction, page 1 and Purpose and Need, Pages 3 and 4 of the draft EA).

Weed-free hay will be used in management operations. See response on page 33, RESOURCE MANAGEMENT/OTHER RESOURCE PROTECTION.

See response on page 28, TRANSMISSION OF BRUCELLOSIS.

NEPA

While some respondents commented on the thoroughness of the EA, many form letters were opposed to the draft EA and requested an EIS process. Many respondents felt the EA failed to offer a sufficient range of alternatives required by NEPA. One respondent was concerned

that the terminology "perceived possibility of transmission" was inaccurate. Another respondent stated that nothing in the assessment discussed the cultural and religious issues associated with the presence of bison in this area. Many respondents stated the review and comment period was too short. One respondent felt that his perspective (that of an animal protectionist) was not adequately represented. Several respondents stated that a FONSI could not legally accompany this EA due to a lack of full-range of alternatives, meaningful analysis, and a lack of true public input.

"hardly believe work ...covered in an excellent manner"

"NEPA...is primarily directed to the impact associated with the development and or change in the use of land...and its associated fauna and flora...Here, however, the assessment speaks to issues that are primarily medical and biological...and therefore transcend issues primarily associated with specific parcels of land."

RESPONSE: See response on page 34, NEPA.

POLICY AND LEGAL ISSUES

Respondents questioned whether the EA met the intent of the U.S. Constitution, and the National Park Service Organic Act. Several respondents commented that the preferred alternative was contrary to the mission of the national parks. Some respondents were concerned that the draft EA was just a 'rubber-stamping' of the settlement agreement.

"The proposed alternative violates the intent of the Park Organic Act (1916)."

"The Draft EA as presented constitutes an attempt to approve the outcome of the settlement in the guise of the preferred Alternative 1, as opposed to undertaking a meaningful analysis of the options and incorporating meaningful public input."

RESPONSE: As described earlier (See response on Page 42, POLICY AND LEGAL ISSUES) the proposed action is within the legal authorities of the respective cooperating agencies. The EA was provided for public review on December 20, 1995, with the comment period extended through February 2, 1996. All substantive comments were considered and information, where appropriate, was incorporated into the analysis.

FINANCIAL IMPACTS

Many respondents were concerned about costs to the taxpayer associated with the alternatives. Others felt that the park and DOL would be tempted to kill bison for economic gain. One respondent felt Alternative 1 would hopefully lead to compete eradication of brucellosis and allow ranchers to market their cattle more freely.

"Taxpayer dollars are being grossly misused to protect private cattle ranchers."

"Incidentally, hiring commercial slaughterhouses and selling meat to defray costs of operations brings temptations of profiteering and corruption."

"Economic Costs are not identified or addressed. An economic analysis must be included in an EIS or FONSI."

RESPONSE: See response on page 35, FINANCIAL IMPACTS.

PUBLIC ENJOYMENT AND EXPECTATIONS/PERSONAL VALUE

A number of respondents commented that bison are national treasures and bison management policy should not be dictated by state or local interests.

"The Montana Veterinarian should not be the determining factor in deciding the fate of the YNP bison, as proposed in Alternative 2. The bison of YNP are treasures granted to the United States not Montana."

RESPONSE: See response on page 21, BISON MANAGEMENT AREAS.

FAVOR OR PREFERENCE GIVEN BY GOVERNMENT TO SPECIAL INTEREST GROUPS

Many respondents stated that the proposed alternative gives unfair preference to special interest groups.

"You are obviously interested solely in the potential financial outlay of cattle ranchers"

"I feel that the Montana State legislature bowed to the threats of a small number of vocal anti-hunters..."

"...bison meat ... distributed mostly to Indian tribes...is discrimination based on race."

RESPONSE: See response on page 37, FAVOR OR PREFERENCE GIVEN BY GOVERNMENT TO SPECIAL INTEREST GROUPS.

NEED FOR RESEARCH AND MONITORING

Many respondents felt that more research was needed into whether or not brucellosis can be transmitted in free-range conditions. Several respondents stated that tests for brucellosis are extremely unreliable.

"Has any research verified any other form of transmission which would apply to free range conditions? Can the bacterium live in other hosts, or even in the harsh winter environment."

"The assessment looks forward to a 'final' management plan, but does not indicate what studies will be undertaken, what methodology employed, and what data compiled to arrive at the 'final' solution."

"No research is being done to test the bison slaughtered within the last few years...Testing requirements must be better addressed in an EIS or FONSI."

RESPONSE: Research projects are underway and others are being planned to better understand brucellosis transmission under free-range conditions (see response on page 37, NEED FOR RESEARCH AND MONITORING). In the fall of 1995, federal and state agencies began a cooperative field study of the epidemiology and pathogenesis of brucellosis in live bison in Yellowstone National Park. The study is intended to address the transmission of brucellosis among bison and the natural course of the disease in individual bison under free-range conditions. In addressing brucellosis transmission, the study will focus on milk, uterine discharges, and birth tissues. Researchers will study the natural course of the disease in individual bison by periodically capturing the same animals over about five years and collecting appropriate specimens (such as blood, tissue biopsies, milk, and culture swabs) for serology, histology, and culture.

During the winter of 1994-1995, a federal-state cooperative study on slaughtered bison began. Based on the brucellosis card test, a serological test that can be conducted in the field, primarily card-positive female bison shot under the current interim plan are selected for specimen collection. Based on a sampling protocol prepared by the Greater Yellowstone Interagency Brucellosis Committee, many tissues, swabs, and body fluids (including blood) are collected and examined by culture and histology for presence of *Brucella abortus*. Serum is tested for presence of *B. abortus* antibodies. Nearly 40 samples are taken from each animal. The study has several objectives. One objective is to produce a minimum estimate of the proportion of serologically positive bison that are actually harboring *B. abortus*. Another is to look for a pattern of serological results that can be correlated with the ability to culture *B. abortus*. The third is to determine which tissues are most and least likely to yield *B. abortus* isolates so that future sampling can be streamlined.

DISTRIBUTION OF BISON CARCASSES

Several respondents stated that meat should be given to the tribes and needy. However one respondent felt that selling or even giving infected meat to Native Americans is reprehensible. One respondent stated that the usable non-meat bison parts should be sold and the money returned to Yellowstone National Park.

RESPONSE: See response on page 14, DISTRIBUTION OF BISON CARCASSES.

FEDERAL, STATE, AND TRIBAL AUTHORITY

The issue of who should be involved and who should have control of bison management evoked considerable response. Some respondents questioned who had the authority to manage bison. A few respondents felt the role that Native Americans could take in the capture, slaughter, and management needed to be addressed in the assessment.

"Your plan gives a lot of authority to MDOL."

"I also wonder, under what authority APHIS has jurisdiction in this matter, or the state vet of MT, who is a mouthpiece for the cattle industry."

"What happens when infected/exposed bison roam onto private property and owner does not give permission to remove them?"

RESPONSE: See response on page 8, BISON RESOURCE PROTECTION and response on page 21, BISON MANAGEMENT AREAS.

ERADICATION OF BRUCELLOSIS

Several respondents felt that the plan did not address the eradication of brucellosis from the bison population. Several respondents stated that brucellosis would never be eradicated from the bison population or the Yellowstone Ecosystem.

"There are two main problem areas. One being the fallacy of the brucellosis eradication program itself, which is not addressed."

"This plan is a start, but little more than that. It does not address eradication of this disease from the bison..."

PUBLIC VERSUS PRIVATE LANDS

This issue is related to Alternative Suggestion #7 — Land-Use Restrictions/Change Public Grazing Allotments

RESPONSE: See response on page 25, NEW SUGGESTED ALTERNATIVES, Suggested Alternative #4-Establish Bison-Management Areas/Change Public Grazing Allotments.

QUESTIONS/INFO/ERRATA

Several respondents had specific questions not addressed in the EA including:

"...what happened in 1988-89 that caused excessive numbers (569) of bison to leave the park."

"Why are all captured bison migrating outside the park boundary in the Reese Creek area being sent to slaughter? Why are all pregnant female bison captured in West Yellowstone being sent to slaughter?"

"Under affected environment and climate the low winter temperature is listed as -40°C (-40°F). -40°C is not equal to -40°F."

"The current map in this statement does not show all the areas mentioned. Slough and Reese Creek in particular."

"It is important to recognize that brucellosis is often fatal to moose."

"I wonder why, if the bison remain in the park during the summer and migrate in winter, and the cattle range during the summer and are rounded up for the winter, there would be any contact at all?"

"The total number of bison cited in the assessment are based upon unpublished data and personal communication — hardly persuasive scientific data: Therefore...we do not know and cannot understand the true dimensions of the population dynamics here."

RESPONSE: A combination of severe drought and extensive fires during the summer of 1988, accompanied by severe winter conditions during the winter of 1988-89, likely all contributed to large numbers of bison moving north of the Yellowstone National Park boundary. The number 569 refers to the number of bison killed that winter due to management actions.

Bison captured in the Stephens Creek area are being sent to slaughter to prevent bison movement onto adjacent, private land (See page 8 of the draft EA). Regarding the slaughter of pregnant female bison in the West Yellowstone area, see response on page 5, TRANSMISSION OF BRUCELLOSIS.

-40° C is equal to -40° F using the standard conversion formula,
(Degrees Fahrenheit) - 32 x (5/9) = Degrees Celsius

Please see revised Figure 1, page 23.

The bison population data presented in Table 1 were collected using standard survey techniques of bison wintering areas throughout YNP. Numbers reported are actual number of bison counted. The data have not been formally prepared in a paper and subjected to peer review and are reported as unpublished data.



APPENDIX I

**MONTANA STATUTES FOR MANAGEMENT OF LIVESTOCK
FOR DISEASE PURPOSES**



Part 1 General Administration

81-2-101. Authority of department agents. In the performance of his official duties, an agent or officer of the department may enter on or in a lot, yard, land, building, room, premises, enclosure, car, wagon, boat, or other place or vehicle used for the treatment, storage, manufacture, display, or transportation of animals, meat, or dairy products intended for sale or disposal as food. The agent or officer may enter anywhere where there may be found livestock affected with or which has been exposed to or which the officer has reason to believe is either affected with or has been exposed to an infectious, contagious, communicable, or dangerous disease or disease-carrying insects.

History: En. Sec. 7, Ch. 262, L. 1921; re-en. Sec. 3266, R.C.M. 1921; re-en. Sec. 3266, R.C.M. 1935; amd. Sec. 55, Ch. 310, L. 1974; R.C.M. 1947, 46-207.

Cross References
Search and seizure, Art. II, Sec. 11, Mont.
Const., Title 46, ch. 5.

81-2-102. Powers of department. (1) The department may:

(a) supervise the sanitary conditions of livestock in this state, under the provisions of the constitution and statutes of this state and the rules adopted by the department. The department may quarantine a lot, yard, land, building, room, premises, enclosure, or other place or section in this state which is or may be used or occupied by livestock and which in the judgment of the department is infected or contaminated with an infectious, contagious, communicable, or dangerous disease or disease-carrying medium by which the disease may be communicated. The department may quarantine livestock in this state when the livestock is affected with or has been exposed to disease or disease-carrying medium. The department may prescribe treatments and enforce sanitary rules which are necessary and proper to circumscribe, extirpate, control, or prevent the disease.

(b) foster, promote, and protect the livestock industry in this state by the investigation of diseases and other subjects related to ways and means of prevention, extirpation, and control of diseases or to the care of livestock and its products and to this end may establish and maintain a laboratory, may make or cause to be made biologic products, curatives, and preventative agents, and may perform any other acts and things as may be necessary or proper in the fostering, promotion, or protection of the livestock industry in this state;

(c) impose and collect such fees as the department considers appropriate for the tests and services performed by it at the laboratory or elsewhere and for biologic products, curatives, and preventative agents made or caused to be made by the department. In fixing these fees the department shall take into consideration the costs, both direct and indirect, of the tests, services, products, curatives, and agents. All fees shall be deposited in the state special revenue fund for the use of the animal health functions of the department.

(d) adopt rules and orders which it considers necessary or proper to prevent the introduction or spreading of infectious, contagious, communicable, or dangerous diseases affecting livestock in this state and to this end may adopt rules and orders necessary or proper governing inspections and tests of live-

stock intended for importation into this state before it may be imported into this state;

(e) adopt rules and orders which it considers necessary or proper for the inspection, testing, and quarantine of all livestock imported into this state;

(f) adopt rules and orders which it considers necessary or proper for the supervision, inspection, and control of the standards and sanitary conditions of slaughterhouses, meat depots, meat and meat food products, dairies, milk depots, milk and its byproducts, barns, dairy cows, factories, and other places and premises where meat or meat foods, milk or its products, or any byproducts thereof intended for sale or consumption as food are produced, kept, handled, or stored. An authorized representative of the department may take samples of a product so produced, kept, handled, or stored for analysis or testing by the department. The records of the samples and their analysis and test, when identified as to the sample by the oath of the officer taking it and verified as to the analysis or test by the oath of the chemist or bacteriologist making it, are prima facie evidence of the facts set forth in them when offered in evidence in a prosecution or action at law or in equity for violation of part 1, 2, or 3 of this chapter. 81-9-201, 81-20-101, 81-21-102, 81-21-103, or a rule or order of the board adopted thereunder. These standards, insofar as they relate to dairies or milk and its byproducts, may not include standards of weight or measurement.

(g) adopt rules and orders which seem necessary or proper for the supervision and control of manufactured and refined foods for livestock and the manufacture, importation, sale, and method of using a biologic remedy or curative agent for the treatment of diseases of livestock. However, as far as practicable the standards approved by the United States department of agriculture shall be adopted.

(h) install an adequate system of meat inspection in accordance with 81-9-216 through 81-9-220 and 81-9-226 through 81-9-236 which shall provide ways and means for shipping home-grown and home-killed meats into any city in this state. As far as practicable, the rules shall conform with the meat-inspection requirements of the United States department of agriculture.

(i) slaughter or cause to be slaughtered any livestock in this state known to be affected with or which has been exposed to an infectious, contagious, communicable, or dangerous disease, when such slaughter is necessary for the protection of other livestock, and destroy or cause to be destroyed all barns, stables, sheds, outbuildings, fixtures, furniture, or personal property infected with any such infectious, contagious, communicable, or dangerous disease when they cannot be thoroughly cleaned and disinfected and the destruction is necessary to prevent the spreading of the disease;

(j) indemnify the owner of any property destroyed by order of the department or pursuant to any rules adopted by the department under part 1, 2, or 3 of this chapter, 81-20-101, 81-21-102, 81-21-103;

(k) require persons, firms, and corporations engaged in the production or handling of meat, meat food products, dairy products, or any byproducts thereof to furnish statistics of the quantity and cost of the food and food products produced or handled and the name and address of persons supplying them any of the products.

(2) When in the exercise of its powers or the discharge of its duties it becomes necessary for employees of the department to investigate facts and conditions, they may administer oaths, take affidavits, and compel the attendance and testimony of witnesses.

History: (1) En. Sec. 8, Ch. 262, L. 1921; re-en. Sec. 3267, R.C.M. 1921; re-en. Sec. 3267, R.C.M. 1935; amd. Sec. 56, Ch. 310, L. 1974; amd. Sec. 1, Ch. 139, L. 1975; amd. Sec. 9, Ch. 12, L. 1977; sec. 46-208, R.C.M. 1947; (2) En. Sec. 31, Ch. 262, L. 1921; re-en. Sec. 3290, R.C.M. 1921; re-en. Sec. 3290, R.C.M. 1935; amd. Sec. 82, Ch. 310, L. 1974; Sec. 46-240, R.C.M. 1947; R.C.M. 1947, 46-209, 46-240; amd. Sec. 1, Ch. 28, L. 1979; amd. Sec. 1, Ch. 277, L. 1983; amd. Sec. 18, Ch. 377, L. 1987.

Cross-References

Montana Administrative Procedure Act — adoption and publication of rules, Title 2, ch. 4, part 3.

Veterinary medicine, Title 37, ch. 18.

Montana Food, Drug, and Cosmetic Act, Title 50, ch. 31, parts 1 and 2.

Related agricultural rules, 80-9-103.

Consideration of administrator's expertise, 81-1-303.

81-2-103. Adoption of rules. The department shall adopt and enforce rules for the inspection and tuberculin testing of dairy cattle or other animals and for the inspection, testing, treatment, or disposition of livestock or other animals affected with or which may have been exposed to infectious, contagious, communicable, or dangerous disease and for the quarantines provided for in this chapter or 81-20-101.

History: En. Sec. 9, Ch. 262, L. 1921; re-en. Sec. 3268, R.C.M. 1921; re-en. Sec. 3268, R.C.M. 1935; amd. Sec. 59, Ch. 310, L. 1974; amd. Sec. 10, Ch. 12, L. 1977; R.C.M. 1947, 46-211; amd. Sec. 1, Ch. 110, L. 1981.

Cross-References

Montana Administrative Procedure Act — adoption and publication of rules, Title 2, ch. 4, part 3.

81-2-104. Rules — agreement with federal government. When the department determines that it is necessary to eradicate or control an infectious, contagious, communicable, or dangerous disease of livestock in this state, in cooperation with the United States department of agriculture or other federal agency, and to appraise and destroy animals affected with or which have been exposed to a disease or to destroy property in order to remove the infection and complete the cleaning and disinfection of the premises or to do any act or incur any other expense reasonably necessary in suppressing this disease, the board may accept and adopt on behalf of the state the rules adopted by the United States department of agriculture or other federal agency under authority of an act of congress or the portion considered necessary, suitable, or applicable. The department may adopt other rules necessary or desirable for this purpose and cooperate with the United States department of agriculture or other federal agency in the enforcement of the rules accepted and adopted.

History: En. Sec. 2, Ch. 177, L. 1937; amd. Sec. 71, Ch. 310, L. 1974; R.C.M. 1947, 46-227.

Cross-References

Montana Administrative Procedure Act — adoption and publication of rules, Title 2, ch. 4, part 3.

81-2-105. Authority of municipal corporations. Nothing in this title prevents the governing authority of a municipal corporation from enacting or enforcing ordinances for the inspection of slaughterhouses, meat depots, meat markets, meat food products, creameries, butter or cheese factories, dairies, or dairy products located, sold, or offered for sale in the limits of the municipal corporation. An ordinance may not be enforced in conflict with the powers of this title delegated to the department and its officers or agents.

History: En. Sec. 11, Ch. 262, L. 1921; re-en. Sec. 3270, R.C.M. 1921; re-en. Sec. 3270, R.C.M. 1935; amd. Sec. 63, Ch. 310, L. 1974; amd. Sec. 12, Ch. 12, L. 1977; R.C.M. 1947, 46-217; amd. Sec. 1, Ch. 14, L. 1979.

Cross-References

Opening of public market, 7-21-3303.

81-2-106. Cooperation by public officers. The department of public health and human services and local boards of health of a county, city, or town shall cooperate with and assist the department in matters that relate to the execution of its sanitary powers regarding livestock and their food products in the manner prescribed by the department, either by general rule or direct order.

History: En. Sec. 25, Ch. 262, L. 1921; re-en. Sec. 3284, R.C.M. 1921; re-en. Sec. 3284, R.C.M. 1935; amd. Sec. 78, Ch. 310, L. 1974; amd. Sec. 21, Ch. 12, L. 1977; R.C.M. 1947, 46-234; amd. Sec. 348, Ch. 418, L. 1995; amd. Sec. 548, Ch. 548, L. 1995.

Compiler's Comments

1985 Amendments: Chapter 418 at beginning substituted "department of public health" for "department of health and environmental sciences", substituted "board of public health" for "board of health and environmental sciences", and in two places, after "department", deleted "of livestock", and made minor changes in style. Amendment effective July 1, 1995.

Chapter 548 at beginning substituted "department of public health and human services" for "department of health and environmental sciences, the board of health and environmental sciences" Amendment effective July 1, 1995.

Cross-References

Montana Food, Drug, and Cosmetic Act, Title 50, ch. 31.

Food establishments, Title 50, ch. 50.

81-2-107. Duty to report contagious diseases. A person, including the owner or custodian, who has reason to suspect the existence of a dangerous, infectious, contagious, or communicable disease in livestock or the presence of animals exposed to the disease in this state shall immediately give notice to the department.

History: En. Sec. 27, Ch. 262, L. 1921; re-en. Sec. 3286, R.C.M. 1921; re-en. Sec. 3286, R.C.M. 1935; amd. Sec. 80, Ch. 310, L. 1974; R.C.M. 1947, 46-236.

81-2-108. Diseased animals not to run at large — burial of carcasses. It shall be unlawful for any owner, agent, or person in charge of any domestic animal or animals that are known to be suffering from or exposed to a dangerous, infectious, contagious, or communicable disease to permit such animal or animals to run at large on the public range or public highway. It shall be the duty of the owner or agent or person in charge of animals which died or they have reason to suspect did die from an infectious, contagious, communicable, or dangerous disease to properly bury or burn the same.

History: En. Sec. 26, Ch. 262, L. 1921; re-en. Sec. 3287, R.C.M. 1921; re-en. Sec. 3287, R.C.M. 1935; R.C.M. 1947, 46-237.

Cross-References

Tables control, Title 50, ch. 23.

81-2-109. Expenses, how paid — lien and foreclosure. (1) If there is no violation of law or department rule, the expense of inspecting, testing, supervision of quarantine, supervision of dipping, supervision of disinfection, and supervision of other treatment of diseased or exposed livestock by the department and the sanitary inspection of dairies, packinghouses, meat depots, slaughterhouses, milk depots, and other premises shall be paid for by the department. However, the owner of the livestock or property is liable for all expenses, except the salary of the designated supervising officer representing the department, when the owner, agent, or person in charge of the livestock or property has violated the law or rules of the department.

(2) The expenses for which an owner, agent, or person in charge is liable under subsection (1) include:

- (a) all investigatory expenses, including travel, meals, and lodging of all investigating officers representing the department; and
- (b) all other expenses, extraordinary or otherwise, that in the judgment of the department are reasonably necessary to ensure that there has been or will be compliance with all applicable laws and rules.

(3) The department, at the conclusion of an investigation of a violation, shall serve notice on the violator, informing him of all expenses for which he is liable. The notice must state that if a response is not sent within 30 days of receipt of the notice, the notice is prima facie evidence of the reasonableness of the expenses and of the violator's liability for them.

(4) A showing by the department that a response to the notice required by subsection (3) was not received within 30 days of receipt of the notice is prima facie evidence of the reasonableness of the expenses stated and of the liability of the violator for those expenses.

(5) These expenses are a lien on the livestock or other property, and the department may retain possession of the livestock until the charges and expenses are paid. The lien is not dependent on possession and may be foreclosed in the name of the agent of the department by sale at public auction of the stock or as many as may be necessary to pay the sum of the costs, after 10 days' notice by posting in three public places in the county. The lien may also be foreclosed by an action in a court of competent jurisdiction against the owner of the livestock to recover the amount of charges and expenses.

History: En. Sec. 21, Ch. 262, L. 1921; re-en. Sec. 3286, R.C.M. 1921; re-en. Sec. 3286, R.C.M. 1935; and Sec. 74, Ch. 310, L. 1974; and Sec. 18, Ch. 12, L. 1977; R.C.M. 1947, 46-230; and Sec. 2, Ch. 24, L. 1978; and Sec. 1, Ch. 353, L. 1983.

Cross-References

Liens — general provisions, Title 71, ch. 3, part 1.

81-2-110. Expense of cleaning and disinfecting carriers' facilities. The expense of cleaning and disinfecting cars, yards, or other transportation facilities of a common carrier, when required by the department, is a charge against the common carrier. Also, the expense of supervising the cleaning and disinfecting of cars for transportation of livestock, when required at a point

other than disinfection points agreed on between the department and the carrier, is a charge against the common carrier.

History: En. Sec. 22, Ch. 262, L. 1921; re-en. Sec. 3281, R.C.M. 1921; re-en. Sec. 3281, R.C.M. 1935; and Sec. 75, Ch. 310, L. 1974; R.C.M. 1947, 46-231.

Cross-References

Carriers of property, Title 69, ch. 11, part

4.

81-2-111. Injunctive remedies. The department may apply for and the court may grant a temporary or permanent injunction restraining any person from violating the provisions of parts 1 through 3 of this chapter or rules adopted thereunder, notwithstanding the existence of other remedies at law. When the application of other remedies has been insufficient to compel action to control, extirpate, or prevent the spread of disease or upon a showing that an animal disease emergency exists and that other remedies probably would be insufficient to compel action to control the emergency, the department may apply for and the court may grant mandatory injunctive relief.

History: En. 46-210.1 by Sec. 1, Ch. 190, L. 1977; R.C.M. 1947, 46-210.1.

Cross-References

Provisions on injunctions, Title 27, ch. 19.

Penalty for misdemeanor, 46-18-212.

81-2-112. Prohibition by governor on importation of animals from localities where disease exists — penalty. (1) Whenever the governor has good reason to believe that any disease dangerous or inimical to the livestock or poultry industry or dangerous to dogs or other animals has become epidemic in certain localities in any other state, territory, District of Columbia, or other country, he shall issue a proclamation designating such localities and prohibiting the importation therefrom into this state, except under such restrictions as he may deem proper, of any livestock, poultry, dogs, or other animals or articles or commodities likely to convey such disease or diseases.

(2) Any person who, after the publication of such proclamation, knowingly receives any livestock, dog, fowl, or other animal or article or commodity designated in such proclamation as likely to convey disease from any of the prohibited districts and transports or conveys the same within the limits of this state is punishable by imprisonment in the county jail for not less than 60 days or more than 8 months and by a fine of not less than \$300 or more than \$5,000 or by both such fine and imprisonment and is further liable for any and all damages and loss that may be sustained by any person or persons by reason of the disobedience of such proclamation.

History: (1) En. Sec. 1, Ch. 31, L. 1925; re-en. Sec. 3295.1, R.C.M. 1935; Sec. 46-245, R.C.M. 1947; (2) En. Sec. 2, Ch. 31, L. 1925; re-en. Sec. 3295.2, R.C.M. 1935; Sec. 46-245, R.C.M. 1947; R.C.M. 1947, 46-245, 46-246.

81-2-113. Penalty. Any person, persons, firm, or corporation violating any provision of parts 1 through 3 of this chapter, or the rule or order promulgated by authority of same shall be guilty of a misdemeanor. Violations shall be tried without undue delay in any court of competent jurisdiction.

History: En. Sec. 19, Ch. 262, L. 1921; re-en. Sec. 3288, R.C.M. 1921; re-en. Sec. 3288, R.C.M. 1935; and Sec. 25, Ch. 12, L. 1977; R.C.M. 1947, 46-238.

Cross-References

Penalty for misdemeanor, 46-18-212.

81-2-114. Civil liability. A person, firm, or corporation which violates parts 1 through 3 of this chapter or rules or orders of the department is liable for damages sustained by a person because of the violation. The damages may be recovered by the person in a civil action in a court of competent jurisdiction.

History: En. Sec. 30, Ch. 262, L. 1921; re-en. Sec. 3289, R.C.M. 1921; re-en. Sec. 3289, R.C.M. 1935; amd. Sec. 81, Ch. 210, L. 1974; amd. Sec. 24, Ch. 12, L. 1977; R.C.M. 1947, 46-239.

81-2-115 through 81-2-119 reserved.

81-2-120. Management of wild buffalo or bison for disease control. (1) Whenever a publicly owned wild buffalo or bison from a herd that is infected with a dangerous disease enters the state of Montana on public or private land and the disease may spread to persons or livestock or whenever the presence of wild buffalo or bison may jeopardize Montana's compliance with federally administered livestock disease control programs, the department may, under a plan approved by the governor, use any feasible method in taking one or more of the following actions:

(a) The live wild buffalo or bison may be physically removed by the safest and most expeditious means from within the state boundaries, including but not limited to hazing and aversion tactics or capture, transportation, or delivery to a department-approved slaughterhouse.

(b) The live wild buffalo or bison may be destroyed by the use of firearms. If a firearm cannot be used for reasons of public safety or regard for public or private property, the animal may be relocated to a place that is free from public or private hazards and destroyed by firearms or by a humane means of euthanasia.

(2) Whenever the department is responsible for the death of a wild buffalo or bison, either purposefully or unintentionally, the carcass of the animal must be disposed of by the most economical means, including but not limited to burying, incineration, rendering, or field dressing for donation or delivery to a department-approved slaughterhouse or slaughter destination.

(3) In disposing of the carcass, the department:

(a) as first priority, may donate a wild buffalo or bison carcass to a charity or to an Indian tribal organization; or

(b) may sell a wild buffalo or bison carcass to help defray expenses of the department. If the carcass is sold in this manner, the department shall deposit any revenue derived from the sale of the wild buffalo or bison carcass to the state special revenue fund to the credit of the department.

(4) The department may adopt rules with regard to management of publicly owned wild buffalo or bison that enter Montana on private or public land and that are from a herd that is infected with a contagious disease that may spread to persons or livestock and may jeopardize compliance with federally administered livestock disease control programs.

History: En. Sec. 1, Ch. 346, L. 1995.

Compiler's Comments

Effective Date: Section 5, Ch. 346, L. 1995, provided: "[This act] is effective on passage and approval." Approved April 20, 1995.

81-2-121. Taking of publicly owned wild buffalo or bison that are present on private property — notice — supplemental feeding —

penalty. (1) This chapter may not be construed to impose, by implication or otherwise, criminal liability on a landowner or the agent of a landowner for the taking of a publicly owned wild buffalo or bison that is suspected of carrying disease and that is present on the landowner's private property and is potentially associating with or otherwise threatening the landowner's livestock if:

(a) the landowner or agent notifies or makes a good faith effort to notify the department in order to allow as much time as practicable for the department to first take or remove the publicly owned wild buffalo or bison that is present on the landowner's property;

(b) the landowner or agent makes a good faith effort to notify the department that a taking has occurred and to retain all parts for disposal by the department; and

(c) the landowner or agent is not in violation of subsection (2).

(2) A person may not intentionally provide supplemental feed to game animals in a manner that results in artificial concentration of game animals that may potentially contribute to the transmission of disease. A person who violates this subsection is guilty of a misdemeanor and is subject to the penalty provided in 87-1-102(1). This subsection does not apply to supplemental feeding activities conducted by the department for disease control purposes.

History: En. Sec. 3, Ch. 540, L. 1995.

Compiler's Comments

Effective Date: Section 4, Ch. 540, L. 1995, provided: "[This act] is effective on passage and approval." Approved April 27, 1995.

Coordination Instruction: Section 3(2)(b), Ch. 540, L. 1995, provided: "If Senate Bill No. 312 is passed and approved and if it transfers to the department of livestock primary manage-

ment of publicly owned wild buffalo or bison that enter Montana on private or public land, then . . . a new section is enacted to read" (see 1995 Session Law for text). Senate Bill No. 312 was approved April 1, 1995, as Ch. 346, L. 1995; therefore, the coordinated version of 81-2-121 in sec. 3(2)(b), Ch. 540, L. 1995, has been appropriately codified.

Part 2 Indemnity

Part Cross-References

Indemnity, Title 28, ch. 11, part 3.

81-2-201. Classification of animals as to compensation for slaughter. Animals slaughtered under the direction of the department by order of the board are divided into two classes for the purposes of compensation:

(1) Animals determined by the department to be affected with an incurable disease, which are destroyed by order of the board, are designated as animals of class 1, and unless otherwise provided each of the animals shall be paid for on the basis of 75% of its appraised value. The county in which the animal was owned at the time it was determined to be affected with an incurable disease is liable in part, as later provided, for an indemnity to be paid for the animal. The ownership and county are determined by an affidavit of the owner of the animal or his agent. Each animal directed to be destroyed shall be appraised by a representative or an authorized agent of the department with the owner agreeing in writing as to the value of the animal. When appraised, due consideration shall be given to its breeding value as well as its dairy or meat value and the condition of the animal as to the disease and the present and probable effect of the disease on the animal. In the absence of an agreement,

APPENDIX II
DOCUMENTATION OF HUMAN BRUCELLOSIS ACQUIRED FROM ELK
IN 1986 AND 1995



DEPARTMENT OF
PUBLIC HEALTH AND HUMAN SERVICES



MARC RACICOT
GOVERNOR

PETER S. BLOUKE, PhD
DIRECTOR

STATE OF MONTANA

Date: March 4, 1996

To: Clarence Siroky, D.V.M.
Montana State Veterinarian
Department of Livestock

From: Todd Damrow, Ph.D., M.P.H.
Montana State Epidemiologist
Department of Public Health and Human Services

Subject: ENVIRONMENTAL ASSESSMENT, 1995 INTERIM PLAN

Per your request, the Montana Department of Public Health and Human Services confirms the occurrence of two cases of human brucellosis which we suspect were acquired from wild elk in Montana.

Case #1 occurred in a 40 y.o., male, resident of Yellowstone County in 1995. The subject reportedly field-dressed a cow elk taken during a hunting trip in Madison County prior to their onset of illness. No additional risk factors for brucellosis were identified.

Case #2 occurred in a 39 y.o. male rancher in Madison County in 1986. Subsequent veterinary investigation showed that all 250 head in the subject's herd had been vaccinated against brucellosis, and that each animal tested negative for evidence of infection. Prior to the onset of illness, the subject reportedly field-dressed three elk from Yellowstone Park during a special hunting season. Two of the elk were females and one reportedly pregnant. This is suspected to be the source of infections. Additional information on the above two cases are available on request.

The Montana Department of Public Health and Human Services considers brucellosis to be a potentially serious human health threat in our state at this time insofar as additional cases can be expected to occur, and can result in serious, prolonged and debilitating disease conditions.



